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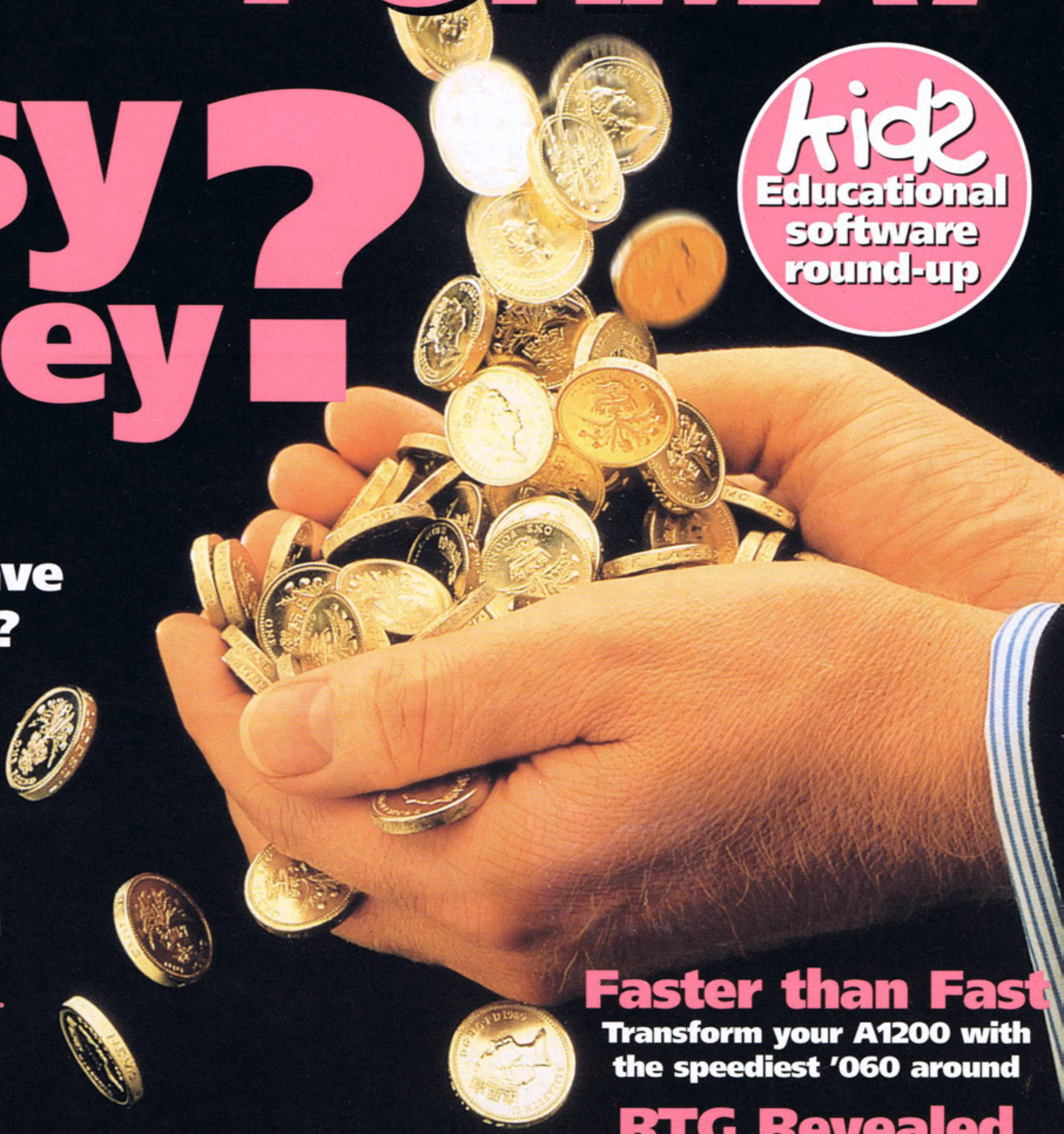
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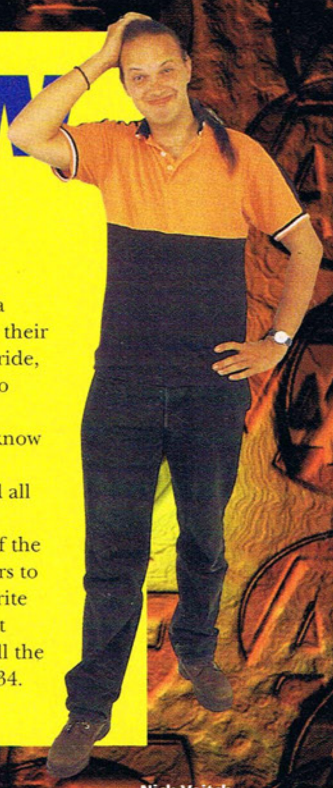
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Month In View



It's a brighter future for the Amiga, and a slightly brighter looking Nick Veitch who welcomes you to another issue...

We have had quite a busy month, what with clearing up after the party last issue, but we haven't been too busy to come up with another issue of the magazine packed with reviews, tutorials, features and advice.

Not to mention news, and what great news we have had – new Amigas on the horizon at last. No, I'm not kidding, check out the news on page 8 if you don't believe me. Although they will be reworked A1200s, it is gratifying to be able to tell people where they can buy Amigas from again. And indeed, an A1200 board in a tower case is more than just a cosmetic change – the flexibility offered by these news systems allows the easy addition of devices which are more or less *de rigeur*, such as hard disks and CD-ROM drives. And the future of the Amiga really relies on it attracting more new users.

Another good indicator of the state of the Amiga market, is the number of people who are registering their Shareware. Okay, there are still some who get a free ride, but it is encouraging to meet some of the people who have reaped some rewards from their hard labour. Shareware only works properly, in the form that we know it, on the Amiga, and that's something we should be proud, but not complacent, of. Anyway, you can read all about how they succeeded on page 14.

Of course, we still had room for all the reviews of the latest products, a round-up of power supplies, answers to all your games and technical queries and your favourite tutorials. But don't miss out on some of the excellent games nearing completion – Andy Smith gives you all the details and pictures in the previews section on page 34. See you soon...

Nick Veitch
Editor



EASY Money?

EASY MONEY? P14
Shareware has never seemed to be the easy way to riches, but some authors have made substantial sums of money – and perhaps you could too.



Apollo 1266

APOLLO 1266 CARD P64
The fastest '060 card going – find out the pros and cons of adding speed.



RTG

RTG REVEALED P69
Perplexed about Picasso? You won't be after Mr Goodwin's revelations.



Previews

The Genetic Species

Shadow of the Third Moon

PREVIEWS P34
Some of these games you may not have heard of yet, but they will soon be the talk of, wherever Amiga gamesters gather to, er, talk.



Software for kids

SOFTWARE FOR KIDS P66
There has been a dearth of educational software for some time, but thanks to these releases, even the youngest Amiga user can have some fun.

AMIGA FORMAT Contents

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AF REGULARS

AF CREATIVE

AF SERIOUSLY AMIGA

COVER STORY

14 EASY MONEY?

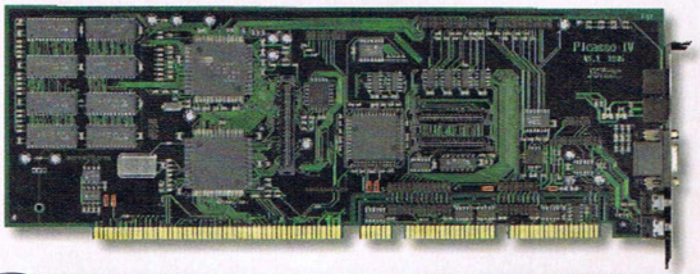
Shareware – it can make you a fortune. It can also save you a fortune! In our extensive seven page feature, hear from the men who've made it and find out if you could do it too.



SCREENPLAY

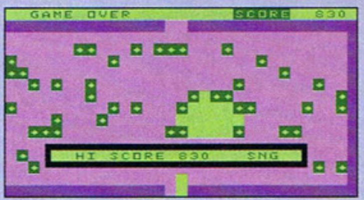


COVERDISKS

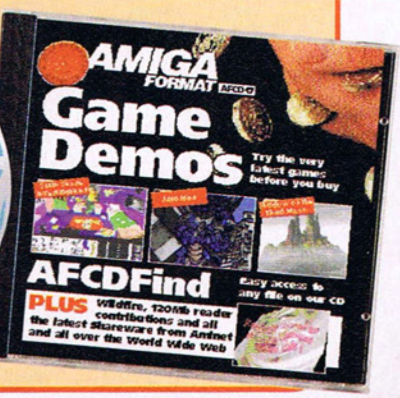


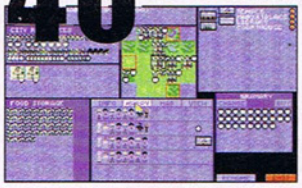
CD-ROMS

EMULATORS









competition competition competition

What's up?

Four new Amigas
Amiga Int. sets up two licensees and a new dealer

New CEd and OctaMED
Old packages revamped

Better burners
New versions for *MasterISO* and *MakeCD* should make life easier for CD-R owners

PicassoIV updates
The RTG board with the mostest gets some add-ons

AMIGA FORMAT news

New Amigas- NEW PRICES

Not one but two new licensees to create Amiga-based computers have been announced in a sudden flurry of activity from Amiga International. First off the starting blocks was MicroniK who will be housing standard A1200 motherboards in their Infinitiv tower system as disclosed last month. Now we have firm pricing details on the three different systems being offered.

The first, the A1300, is a base tower model with no Zorro slots, but as with all these machines, adding them in is simply a matter of ordering the part and fitting it yourself. The other two have Zorro slots and an incrementally larger price.

"Index Information's offering is actually the first new Amiga for four years."

INFINITIV 1300

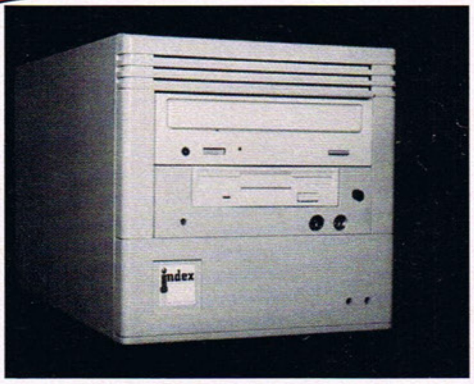
Infinitiv Tower with Amiga 1200 motherboard fitted.
880Kb floppy disk drive
Amiga Internal 150W PSU Separate Amiga keyboard
Operating system OS3.1 / WB 3.1
Handbooks
Price: £349.95

INFINITIV 1400

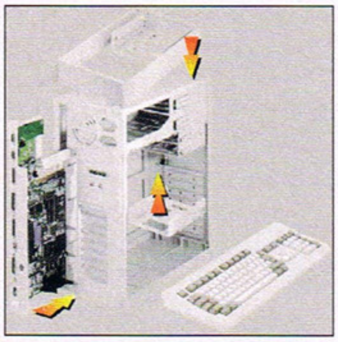
As per Infinitiv 1300 plus:
5 x Zorro II slots
2 x PC ISA slots
2 x PC PCI slots
1 x Video slot (optional)
A1200 Accelerator pass-through
Price: £469.95

INFINITIV 1500

As per Infinitiv 1300 plus:
5 x Zorro II/III slots
1 x PC ISA slots
2 x PC PCI slots
1 x Video slot (optional)
SCSI-II interface
CPU slot
A3000/4000 compatible & 32-bit
Price: £599.95



This unprepossessing grey box contains the first new Amiga in four years.



MicroniK's tower Amigas are easily expandable if you find that you need more room inside.

Index Information Ltd. have also been granted a license and their offering is actually the first new Amiga for four years. It's a completely new motherboard design based on the existing A4000, but designed to fit into a standard 5.25" bay. The Access, as the new unit will be known, is primarily designed for corporate use so if you're interested in one for your home, don't hold your breath. Index Information *are* planning a retail version of the Access, but it probably won't be available at least until early next year.

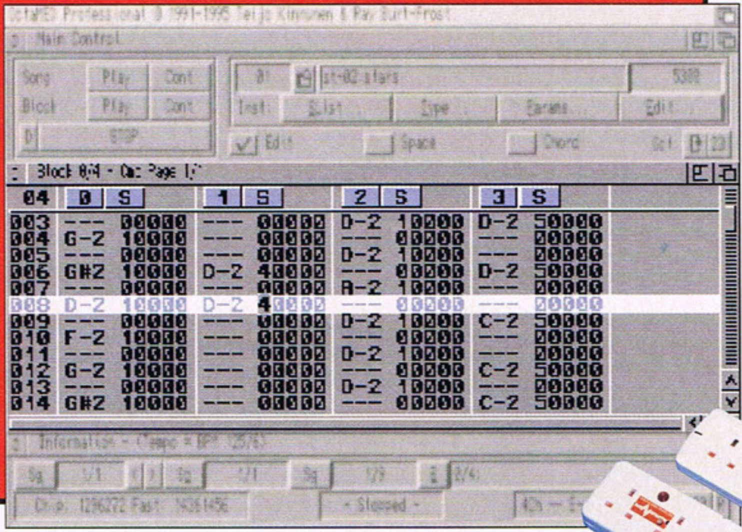
Lastly, if you're interested in a barebones A1200 at a low price, then Wizard's announcement should come as a welcome surprise. They will be selling the standard A1200 for just £249.99 for the Amiga Magic pack (and DOpus 4.12). For an extra £100 you can have 4Mb RAM and a 170Mb hard drive. Wizard are also doing more powerful bundles.

Contact Blittersoft on 01908 261466, Index Information on 01256 703426 and Wizard on 0181 303 1800 for more details or visit blittersoft and Index's websites at: www.blittersoft.com and www.cix.co.uk/~index/

New OctaMED on the horizon?

In a very pleasing revelation this month *Amiga Format* has heard that *OctaMED SoundStudio* is not a dead product. According to *OctaMED* UK publisher Ray Burt Frost, Teijo Kinunnen is committed to creating a new version for the Amiga despite the fact that, as he puts it, "all the Amiga versions we have released previously have been pirated in the thousands, thus making the years' work a total waste of time". Ray has said that the new version is not likely to arrive this year and could only confirm that both AHI and 16-bit samples would be fully supported along with plenty of other, unrevealed, new additions to the program.

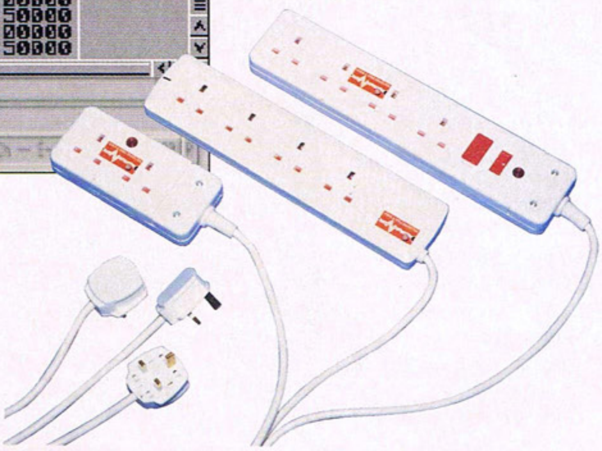
For further details, visit the *OctaMED* web page at www.octamed.co.uk.



A new version of *OctaMED SoundStudio* would be welcomed with open arms by most Amiga musicians.

Surge & Spike

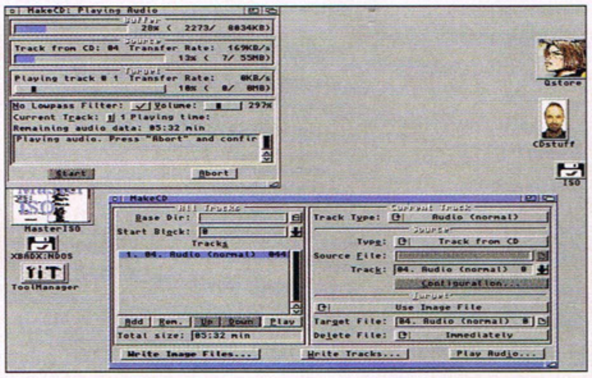
A new "Surge and Spike" socket range from Jo Jo (UK) Ltd claims to protect against electrical surges in computers, audio/visual equipment and domestic appliances. The extension trailing sockets they offer will counteract those irregularities in the power supply which can damage your equipment. The range of four sockets includes a Twin version, plus Heavy Duty, Slimline, and Unwired, (which is designed for wall mounting). For more information, contact Jo Jo on 01933 675333.

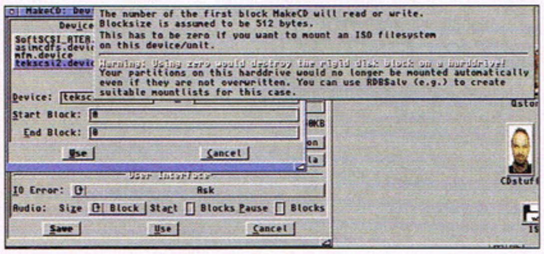


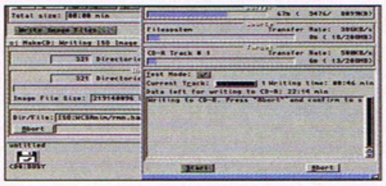
Surge protection made easy with these new power adaptors.

CD software war hots up

This month we hear from both Angela Schmidt and Asimware about new versions of their products *MakeCD* and *MasterISO* respectively. Both programs now claim to support the new CD-RW media – CDs that can be written to and read repeatedly. *MasterISO* gets a much needed interface overhaul and new "beginner" mode while *MakeCD* gets bug-fixed and a few other minor upgrades in addition to RW support. You can contact *MakeCD*'s UK distributor HiSoft for further details on 01525 718181 and visit the Asimware website at www.asimware.com.







***MakeCD* is very comprehensive although some feel it is overly complex. Maybe the new version of *MasterISO* will redress the balance.**

Big Bad Beetleborgs

Japanese alien abductee Akifumi Ohmatsu has cashed in on his experience, and with the help of Tamagotchi, launched a new toy range called "Big Bad Beetleborgs". The 51-year-old grandfather has modelled the Beetleborgs on the beings he encountered on the night of June 14th, 1973, as he slept peacefully in his bed.

Mr. Ohmatsu tried and failed to have his case investigated, after he underwent a "mind exchange" with aliens. He claims that he was not experimented upon, but instead experienced aspects of the beings' emotions and lifestyles during his mental interaction with them. Big Bad Beetlebugs are also going to feature in a new TV series, scheduled to appear on GMTV on Thursday, July 31st.

Simon Goodwin assesses the state of the art in retargetable graphics software ...p24

KEYRING CRAZE
Keyring games are making a comeback in Japan, in yet another '70s revival fad. Tamagotchi creators Bandai are launching three revamped versions of these mini arcade games in the UK this summer: *TETRIS JR.* in July, and *Space Invaders* and *Block Breakers* in August. If you missed them the first time, they're available from all good toy shops and electrical stores for £7.99.

THE BIZ IS OUT
The Data Business Ltd has released its 1997/98 edition of 'The Biz – The Data Production Buyers Guide.' The latest issue lists over 300 products and services required for the manufacture of software and data, and contains details of small volume 'load and go' CD-ROM duplicating hardware. For further information, contact The Data Business 01865.842224 or email admin@databiz.com

FANTASY FOOTBALL
Foresight Online Productions brings you Net.soccer, a new football management game for the Internet. 'Managers' join for a three month, 38-game season where you take charge of training, picking teams, tactics, buying and selling players, and setting wages. It costs £4.99 per season, payable by credit card. Contact Tiema on 0181 2375560 or call up http://www.net soccer.com

CANON CAN
The new Canon Web site is geared towards UK customers, with information on all Canon products, downloadable software, FAQs, and interactive help. Dial it up at http://www.canon.co.uk

Right CEd Stefan

CygnusED, the popular Amiga text editor, will soon be re-released by Stefan Ossowski's Schatztruhe. In cooperation with Bruce Dawson and Olaf Barthel, the editor will be revised and updated for release, fixing long-standing bugs and problems.

The developers are keen to give the Amiga community the opportunity to influence development of the product. Please let them know about your ideas and wishes regarding the editor, what features do you want to see implemented and which problems need attention. Send your requests and suggestions to the following address: schatztruhe@cww.de; every contribution takes part in a lottery, the prize being one of ten copies of the editor, when it is complete.

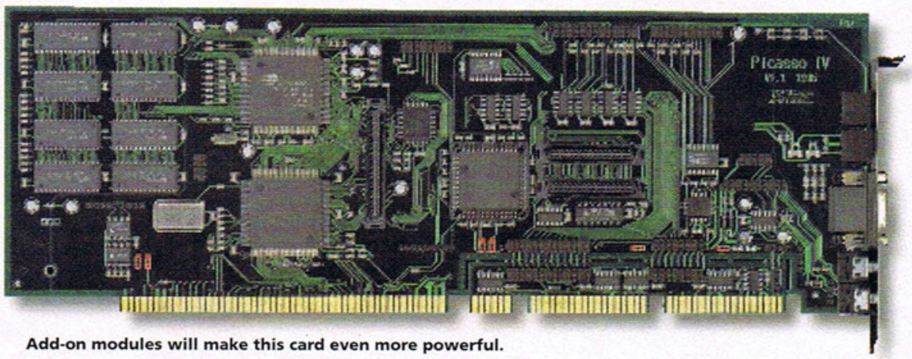
The new CygnusEd version will be published on CD-ROM before the end of this year. Attractive update offers and cross-updates for users of other text editors are being planned.

For more details, visit the Schatztruhe website at www.schatztruhe.de.

Picasso IV in update shocker!

Graphics card manufacturers are notorious for promising all manner of funky add-ons for their products which then never arrive. Examples of this include the modules for the OpalVision, Merlin and CyberVision64 card, but it seems that Village Tronic are really trying to break the mould in this respect. Talking to Olaf Barthel, a sub-contractor for support software for the excellent PicassoIV, he revealed that the modules were actually nearly ready: "The sound card (Concierto) is finished, as far as I can tell, including the support software, which includes AHI support. There still are a few questions open regarding bundling/licensing, but these should be resolved soon enough. The Pablo II video encoder is finished as well, but I haven't written any support software for it yet. The TV-tuner/video capture module is in the making and very close to a production sample. Just like with the Pablo II, I haven't written any support software for it yet. Also in the making is the announced Denise adaptor to allow the PicassoIV to work in an A2000/A3000 with the Video Toaster plugged into the video slot. I do not know its status, though."

Unfortunately, the two most exciting developments for the PicassoIV, the 3D module and PowerPC plug-in, have an unknown status at the moment because Village Tronic are trying to decide which chipset to go with, but this can be seen as a positive development for the Amiga graphics card-owning community. For further details on the upcoming boards, give Blittersoft, the UK distributor for Village Tronic, a call on 01908 261466.



Add-on modules will make this card even more powerful.

Net Corner

SPEED SURFING
Global networking wizards 3Com Corporation have revealed that the new "x2" high-speed access technology from U.S. Robotics is now available to Internet users across the UK.

Seven hundred Internet service providers worldwide, including 30 in the UK, have endorsed the product which enables information to be downloaded from the Net (through ordinary telephone lines) at 56kbps – nearly twice the speed that any current technology can deliver. Uploads from users to service providers can travel at speeds of up to 28.8 kbps.

x2 technology is being utilised immediately by the following UK ISPs: UUNET, Which? Online, NETCOM, Cable On-line, Chamber Online, Virgin Net and Enablis, which means that those customers with an x2-compatible modem and an x2-compatible local analogue telephone line can enjoy the high-speed access immediately.

Other users will soon have the chance to upgrade. For a full list of x2-supporting ISPs, dial up http://www.3com.com

For a list of UK ISPs supporting x2 and upgrade details for U.S. Robotics modems, visit http://x2.usr.co.uk



Hints and tips on all sorts.

LEARN2
Learn2 is a great site, particularly if you're an American, probably on AOL. It manages to turn simple advice on chopping garlic into a four page feature with loads of illustration, just so you know exactly how to chop that clove. That said, it also gives advice on more esoteric things like making kites and... shaving. Doh!
http://www.learn2.com/

DILBERT
If, like us, you work for a company immersed in computing, then Dilbert should really be your first stop in the morning, right after you've made your first cup of coffee.

Dilbert is the creation of Scott Adams and he's a software engineer at a faceless, badly-managed computer company. If you like your humour barbed and technical, this is the site for you.
http://www.unitedmedia.com/comics/dilbert/

BTA COMPETITION
The British Tourist Association is running a competition to see who can come up with the best visual

Crazy Summer Reductions

ICPUG, The Independent Computer Products Users Group, is offering a special summer membership discount. Anyone joining for the six months from 1st July to 31st December 1997 can take advantage of a special subscription rate of only £13 in the UK. The rate for Europe (including Eire) and overseas surface mail is £15.50, and the overseas airmail rate for this special offer is £18.

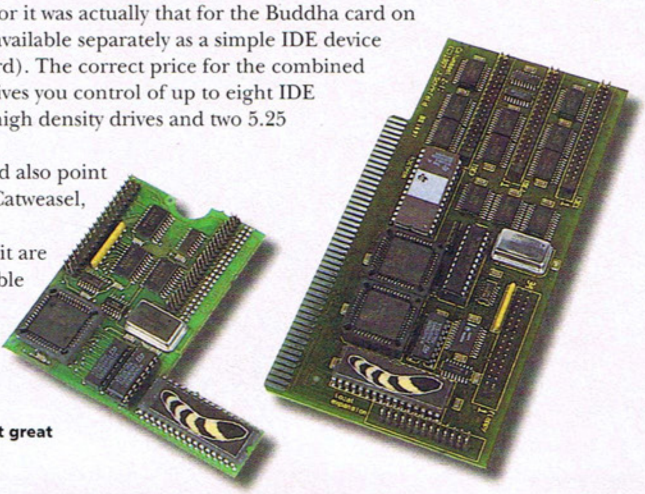
This membership offer includes the balance of the issues of the ICPUG Journal for this year plus a selection of PD software library for the Amiga, and all other Commodore computers. The Journal features regular discounts and technical help telephone numbers which are available for members only.

For further details, contact the Membership Secretary, Tim Arnot, 17 Colne Drive, Oakfields, Didcot, Oxon, OX11 78RZ.
Email: digits@cix.compulink.co.uk Internet: www.icpug.org.uk

Buddha bother

Although we reviewed the Buddha and Catweasel last issue (*AF100* 90%), the price we gave you for it was actually that for the Buddha card on its own (it is available separately as a simple IDE device controller card). The correct price for the combined unit, which gives you control of up to eight IDE devices, two high density drives and two 5.25 drives, is £79.

We should also point out that the Catweasel, Buddha, and combined unit are all also available from Golden Image on 0181 9009291.



Daft names but great products.

representation of its Web site address. The winning entry will get worldwide publicity as the BTA site's official image, and the winner a prize of £1,500 worth of computer equipment.

One entrant is using his sky-writing skills to paint the logo up in the clouds. If you can better that, contact Sara Stewart at The Wright Partnership on 0181.742.7800 or visit http://www.visitbritain.com

ANIMATION ON-LINE

Hibbert Ralph Animation Ltd is using fractal-based ClearVideo technology, designed by Iterated Systems, to post compressed videos of its computer animation to its Web site.

By transferring work-in-progress and completed productions of their music videos, TV commercials and children's programs through this on-line workflow operation, Hibbert Ralph's clients all over the world can approve the work being done for them by accessing the Web site. This will dramatically speed up the whole production process, effectively rendering time zone restrictions obsolete, and representing another step towards a world of 'Global Village'-type dimensions, where distance is no longer a barrier.

Examples of Ralph Hibbert's past and present work can be seen at http://www.hibbert-ralph.co.uk and information on ClearVideo and other digital technology from Iterated Systems can be found at http://www.iterated.co.uk

FUN IN THE SUN

Demon Internet's latest seasonal Web site is called "Summer Fayre," following in the footsteps of their tribute Web sites for Valentine's Day, Christmas and Comic Relief. It features a coconut shy, a fortune teller, a ghost train and fireworks. Get a taste of summer at http://www.demon.net/promotions/fayre/

For more information about Demon Internet, contact James Gardiner on 0181.371.1000.

The Bradford Column



Part of my day job's duties involves visiting independent retailers – perhaps the last bastion of the Amiga's High Street presence. One particular retailer I was having coffee with recently was one of Commodore's most successful dealers and, at its height, had a software selection which stretched 20 feet across the store. Sadly it's now just six feet – not because Amiga owners no longer visit the store but simply due to the fact that the titles on offer are static. A few educational offerings, the EA and MicroProse re-releases from Guildhall and a smattering of fairly recent stuff from teeny-weeny companies.

If somebody did decide to bring out a new range of software then they would find it difficult to find any shelfspace in some outlets. There are no longer thousands of dealers still trying to source Amiga titles and many have now turned to other formats.

And yet... there are still a goodly number of Amiga owners who wish to purchase software for their machines, particularly games, as has been proven by the success of Guildhall's re-releases. So is there scope for more blasts from the past to boost Amiga retailers' shelving? Despite the fact that there are many big publishers who own extensive, quality Amiga back-catalogues, which are just doing nothing, they are unlikely to either use them themselves or allow others to try to exploit the titles by republishing.

"there are still a goodly number of Amiga owners who wish to purchase software for their machines"

Unless, there was some form of central 'Amiga Exchange' where publishers could put their old software and receive a moderate income from it without any hassle or effort on their part. This is something the Internet would be ideal for. Log in to the site, view everything on offer (perhaps with screenshots and reviews) and then download the title of your choice for a moderate fee. Prices could be kept down because there would be no duplication, packaging, distribution or retailers' margins. It could even be done as part of someone's existing Web site, such as *Amiga Format*?

It's just that there are so many old classics – *New Zealand Story, Bubble Bobble, Rainbow Islands, Chessmaster, Wings, Stunt Car Racer, Kick Off 2, Player Manager, Red Storm Rising, Shanghai*, to name but ten – which have been lovingly created, are still as playable as ever, and yet are now nowhere to be found. I'm sure there are many Amiga owners who would willingly pay a nominal sum, say £2 – £3 a title, to have access to this software and, if it was on the Internet, there would be a global market for it. So, there you are Mr Veitch; get your marketing bods to sign up the titles and your Futurenet 'workers' to get busy on the site. The Amiga world awaits...

The opinions expressed here are Dale Bradford's, a man who used to think that HTML was short for "Hold on, That's My Laaager", not necessarily those of *Amiga Format*.

Storming ahead



Haage & Partner are really taking Phase5's PowerUp and ProDAD's p.OS projects seriously. They've just announced several new features for *StormC*, their C/C++ compiler, along with price drops and special offers.

First up, there is no longer a starter version of *StormC*, just the full version 2.0 with a different license agreement (Non Commercial or Professional). There is also no longer a sidegrade deal for users of other C compilers, but Haage & Partner have dropped the price by 100DM. Both packages include the GUI-generator *StormWIZARD*.

In addition, there's a new range of StormC V3.00 upgrades. *StormC V3.0* – PowerUp allows for the flexible programming of the PowerPC dual-processor board by Phase5. *StormC* uses an extended Amiga-hunk-format which has the advantage of enabling the generation of mixed binaries, fat binaries and even PowerPC native shared libraries. The porting of existing software is also tremendously simplified. Soon after the PowerUP-boards start to ship, applications will be available that squeeze the last bit of speed out of dual-processor boards. The compiler supports the programming of all 68000 series CPUs as well as the PowerPC 603, 604 and their respective e-variant CPUs.

StormPowerASM is a PowerPC assembler for the Amiga supporting the entire PowerPC command set.

PACKAGES AND PRICES:

StormC V2.0 Base Package – Non Commercial full version
- single user's license
- allows development of Freeware but not Shareware and commercial software!
- 298DM

StormC V2.0 Base Package – Professional full version
- unrestricted single user's license
- 498DM

Both base packages are identical in terms of content and include:
- StormENVIRONMENT
- StormC Compiler for 68K
- libraries for AmigaOS
- StormWIZARD

StormC V3.0 – p.OS-Modul (base package required (bpr))
- StormENVIRONMENT
- p.OS linker
- StormC-Compiler for 68K p.OS
- libraries for p.OS
- 89DM

StormC V3.0 – PowerUpÆ-Modul (bpr)
- StormENVIRONMENT
- PowerUP linker
- StormC-compiler for 68K and PPC
- PPC-native ANSI-C and math-libraries
- 298DM

StormC V3.0 – PowerASM-Modul (bpr)
- StormENVIRONMENT
- PowerUPÆ linker
- StormPowerASM – macro assembler for PPC 603(e), 604(e)
- impressive PowerPC example programs
- 149DM

Further Products of the Storm Series:

StormPowerASM V3.0 only for Assembler specialists
- supports the entire PowerPC command set
- knows all common assembler directives
- outstanding macro abilities
- supports floating point expressions and operators
- 249DM

StormWIZARD V2.0 GUI toolkit
- platform-independent BOOPSI classes
- allows addition of custom classes
- flexible mouse-based GUI generation
- automatic localisation
- resource linkable to program
- 149DM

Competition time!

In a follow up to all the amazing competitions we had in our 100th issue, we have two more for you to sink your postcards into. The rules are the same as for our 100th issue competitions: Just send a postcard with your name, address on it to the addresses detailed. Please state clearly on your entry if you do not wish to receive details of other special offers from these companies. Anyone found working at Future won't be eligible for these prizes, so that should give you a bigger chance of winning! Closing date for these competitions is 1st September 1997. Good luck!

VideoWebPrint! (Worth £670)

Those good eggs HiSoft have a really doozy of a give away for you. They're giving away a Squirrel 4x SCSI CD-ROM drive and an SMD100 VideoCD player, The Enterprise Net & Web+ Pack with a Whippet and three copies of the Gold-winning *StudioII* printer software. All you need do is send a self-addressed postcard to:

AF100 Hi Life Draw • HiSoft Systems • The Old School • Greenfield • Bedford MK45 5DE

Grab your brushes! (Worth £420)

Blittersoft and Haage & Partner have kindly sent us three copies of their new version of the excellent *Art Effect v2*. To win a copy for yourself, send a self-addressed postcard to:

AF100 Art draw • Blittersoft • 6 Drakes Mews • Crownhill Industry • Milton Keynes MK8 0ER

Scala winners



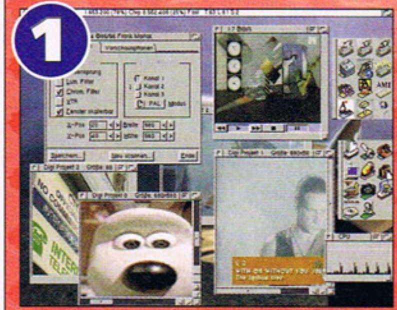
Further to our competition in *AF97* Scala have announced the winners of their competition to win the very latest *MM400*. The lucky so and sos are as follows:

MM400 Winner:
Lance Edusei from Liverpool

HT100 Winners:
Steven Gilks from Evesham
A. Simpson from Blackpool
Ivan Rakiwskyj from Leicester
R Frampton from Blunham
Tomoko Ando from London

GTI Charts June 97

Aminet 19 jumps staright in at number 1 – *AFCD15* isn't doing too bad either.

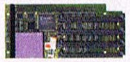


1	(-)	Aminet 19
2	(2)	Amiga CD 7-8/97
3	(1)	Aminet 18
4	(-)	Amiga Format CD15
5	(4)	Geek Gadgets 2
6	(2)	Aminet Set 4
7	(-)	Amy Resource Europe
8	(10)	Tele-Info CD Vol. 2
9	(6)	Aminet 17
10	(-)	APC&TCP CD Vol. 3
11	(5)	Meeting Pearls 4
12	(3)	Amiga Format CD14
13	(9)	Aminet Set 1
14	(13)	Amiga Developer CD
15	(-)	Brotkasten Gold
16	(12)	Aminet Set 2
17	(8)	Aminet Set 3
18	(-)	Hollywood Studio
19	(-)	History of the World Cup
20	(14)	AGA Experience 3

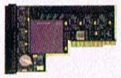
CyberStorm PPC-604	150 MHz	180 MHz	200 MHz
Companion CPU Socket	040 or 060	040 or 060	040 or 060
MIPS			350
SpecFP95			7.1
Max RAM	128Mb	128Mb	128Mb
SIMM Sockets	4	4	4
SCSI On-board	Ultra-Wide	Ultra-Wide	Ultra-Wide
Price	£479.95	£579.95	£679.95
Price with 68040/25 fitted	£549.95	£649.95	£749.95
Price with 68040/40 fitted	£579.95	£699.95	£779.95
Price with 68060 fitted	£729.95	£829.95	£929.95
Registered Upgrade Price	£449.95	£529.95	£599.95

POWER UP
AMIGA™ GOES POWERPC™

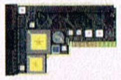
Blizzard 603/603+	175 MHz	200 MHz
Companion CPU Socket	030	040 or 060
MIPS	250	280
SpecFP95	3.1	3.5
Max RAM	64Mb	64Mb
SIMM Sockets	1	1
SCSI On-board	SCSI-II	SCSI-II
Price	£299.95	£379.95
Price with 68030/50 fitted	£369.95	
Price with 68040/25 fitted		£449.95
Price with 68040/50 fitted		£479.95
Price with 68060 fitted		£629.95
Registered Upgrade Price		£599.95



Cyberstorm MKII 60/50
A3/4000 accelerator £399.95
Cyberstorm MKII 40/40
A3/4000 accelerator £249.95



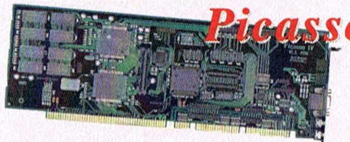
Blizzard 1260 50MHz
A1200 accelerator £329.95
Blizzard 1240 40MHz
A1200 accelerator £199.95



Blizzard 1230 50MHz
A1200 accelerator £ 94.95

Add **SCSI-II** to the above accelerators for £ 64.95

Picasso IV



£279.95

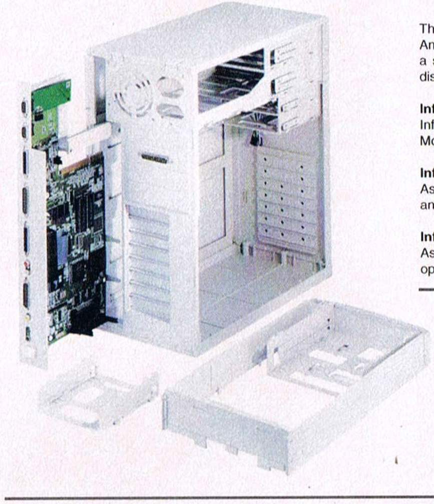
"The God of Amiga graphics cards"

- "Future-proof" modular design!
- Integrated flicker fixer - Use cheap SVGA monitors!
- 4Mb super fast EDO RAM as standard!
- Autosense Zorro II or Zorro III
- Huge 1600x1200 16-bit resolution!
- Large 1280 x 1024 24-bit resolution!
- On-board Audio switching (CD-ROM, Amiga, External)
- 16-bit add-on Sound Module in development!
- Pablo II add-on Video Module in development!
- 3D GFX add-on Module in development!
- MPEG Module in development!
- PowerPC Module planned!
- Supplied with the excellent Picasso96 RTG software.

Infinitiv *Amiga* Computers

Fully Licensed New Amiga's

powered by AMIGA



The new Micronik Infinitiv Tower Sytems are the very first officially licensed Amiga system to become available in the UK. The Infinitiv Tower system is a stylish, expandable and easy to use system. Blittersoft are exclusively distributing three new models, and we can offer various enhancements.

Infinitiv 1300
Infinitiv Tower, Motherboard, OS3.1, 200W PSU, Mouse, External Amiga Keyboard, Floppy drive. **£349.95**

Infinitiv 1400
As per 1300 above plus 5 x Zorro II, 2 x ISA, 2 x PCI and VIdeo option. **£469.95**

Infinitiv 1500
As per 1300 above plus 5 x Zorro III, 1 x ISA, 2 x PCI, Video option, A4000 CPU slot, SCSI-II interface and 1 x SIMM slot. **£599.95**

Add-ons and Accessories

We can also offer additional upgrades and peripherals at reduced costs when purchased with a complete system. We are working on special packs offering additional Hard drives (fitted and Workbench installed), Full Internet solution (33.6 Modem and NetConnect), Monitors, CD-ROM's, Picasso IV graphics board, Mac and PC emulation, Memory, 68xxx and PPC Accelerators etc.

Fusion - Mac Emulation



Fusion is the ultimate software only Mac emulation for ANY Amiga with 68020 or better CPU. Moving on from the Mac emulators of the past, it boasts such advanced features as Virtual memory, on-the-fly screen resolution changing and incredibly fast video (Direct Graphics board Picasso96 and CyberGraphX and Amiga Video). The most technical feature of FUSION is its ICP (Inter-Communications Port). There is a virtual link between the Amiga and the Macintosh while the emulation is running. This link allows any programmer to access any function normally available to Mac programmers and to mount ALL Macintosh volumes on the Amiga side. The devices become AmigaDOS compatible, so you can use your favourite file copying tool (i.e. DirectoryOpus) to copy, delete, rename, etc. files on any Macintosh partition, and all from the Amiga side. The huge feature list of Fusion is too large to detail, so please call if you require further information. **£49.95**

PCx - PC x86 Emulation



PCx is a software only x86 emulation for any 68020+ Amiga. With features such as CPU Transcription, CD-ROM and ASPI drivers, VGA/SVGA graphics, Soundblaster support, video card support, Graffiti support etc..... PCx is the most advanced software PC emulator available for the Amiga! Please call if you require further details. **£49.95**

VARIOUS AMIGA ITEMS

Picasso II+	£149.95
Pablo Video Encoder	£ 49.95
Ariadne	£129.95
Liana 1.6m cable	£ 39.95
Liana 5.0m cable	£ 49.95
AmiTCP	£ 69.95
MainActor Pro	£ 44.95
MainActor Broadcast	£ 99.95
CatWeasel 1200 (PC HD floppy Drive controller)	£ 54.95
CatWeasel 4000 Version	£ 54.95
CatWeasel Zorro + 3 x Buffered IDE interfaces	£ 69.95
IDEFix Buffered 1200 interface with reg. IDE-Fix s/w	£ 34.95
Monitor Adaptor (23-pin monitor to 15-pin gfx card)	£ 14.95
VGA Adaptor (23-pin Amiga to 15-pin monitor)	£ 14.95
Image Vision Multi-Media Authoring	£ 29.95
Graffiti Chunky Graphics adaptor	£ 44.95
Burn-It CD Writing Software - TAO	£ 59.95
Burn-It CD Writing Software - DAO	£ 79.95
Genlock M10	£169.95
Genlock M25	£229.95
Floppy Drive 1.76Mb int. (1200 or 4000 1" high)	£ 54.95
clariSSA V3	£169.95
Floppy Drive 1.76Mb Ext. (No software patch!)	£ 59.95
Adorage V2.5	£109.95
Animage	£ 99.95
Monument Designer V3.0	£229.95

If there is anything you require that is not listed, please give us a call - we can often obtain things not advertised!



Siamese System 1.5

The Siamese system will allow integration of the Amiga with a Windows 95 capable PC. The kit includes a video switching unit, communication lead, CrossDOS and system software. You can be up and running straight away. A full SCSI networking system can be added, which will require a SCSI card on both the Amiga (Surf Squirrel, Oktagon, 4091 etc.) and the PC (Adaptec, etc.). The two systems can now share a single monitor, mouse and keyboard and files can be transferred seamlessly. **£89.95**
New low price!

HAAGE & PARTNER — AMIGA STORM C — AMIGA STORM WIZARD — AMIGA art effect



Power Effects (many new imafe effects) £29.95
SuperView (Adds PhotoCD and 30+ loaders) £29.95

- Powerful Art program with "plug-in"support and classic interface.
- Supports all major Graphics cards.
- New version 2 with layers and VMem.
- Call for further details.

ArtEffect 1.5 £ 59.95
ArtEffect 2.0 £119.95

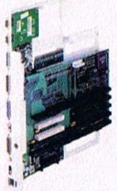
- Highly developed C environment
- Veru user friendly design
- Add-on modules for PPC and p-OS
- Even more powerful V2
- Non-Commercial version available.

Storm C v2.0 Pro £179.95
Storm C v2.0 Pro Non Com. £119.95

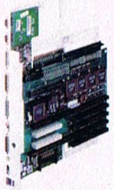
- GUI creator
- Compliments Storm C

Storm Wizard 2.0 £ 69.95

Infinitiv *Expansion* Towers and Parts



Zorro II x 5, ISA x 2 **Z1-i**
PCI x 2, Video (Option)



Zorro III x 5, ISA x 2 **Z3-i**
PCI x 2, Video (Option), SCSI-II, A4000 CPU slot.

Tower Kits for the A3000 and A4000
Our up Towers provide :

High Quality Metal CE Approved Tower
Zorro III slots x 7
ISA slots x 5 (6 for 3000)
Video x 2 (1 for 3000)
PCI version has 3 x PCI and 3 x ISA
They also vastly increase the expansion capabilities for new peripherals

Tower 4000 PCI System	£329.95
Tower 4000 ISA System	£299.95
Tower 3000 ISA System	£329.95
Uprated PSU	£ 69.95
Zorro III/ISA/PCI/Vid (A4000)	£219.95
Zorro III/ISA/Video (A4000)	£179.95
Zorro III/ISA/Video (A3000)	£219.95

Features of the Infinitiv Tower Solutions

- Custom design, simple "slide-in" motherboard cradle.
- Choice of Zorro II or Zorro III expansion boards.
- All boards have PCI, ISA and optional video slots.
- Built-in PC keyboard interface.
- Optional external Amiga Keyboard case (houses A1200 Keyboard)
- Neat, easy connection - No messy wires!
- Pass-through CPU for accelerator boards.
- PCMCIA accessible via optional adaptor.
- Various add-on components to enhance your system further :

4-Way Buffered IDE interfaces
Additional 3.5" bays
Additional 5.25" bays
High Density floppy drives (no software patch)
Custom cables for 2.5" and/or 3.5" hard drives
Audio / SCSI bezels
Two floppy drive system cables

Infinitiv Kit-Z2
Tower, Z1-i Zorro board plus PSU £299.95
Infinitiv Kit-Z3
Tower, Z3-i Zorro board plus PSU £469.95

Component Parts

Infinitiv Tower + Keyboard interface	£119.95
Infinitiv Tower + K/B int. + PSU	£159.95
Z1-i Zorro II x 5, PCI x 2, ISA x 2, Video (option)	£149.95
Z3-i Zorro III x 5, PCI x 2, ISA x 2, Video (option), SCSI-II, A4000 CPU slot	£319.95
Infinitiv uprated PSU	£ 44.95
Infinitiv 3.5" "Snap-on" bay	£ 11.95
Infinitive 5.25" "Snap-on" bay	£ 29.95
PCMCIA Adaptor	£ 29.95
Infinitiv Video Slot Interface	£ 39.95
Power Adaptor	£ 6.95
External A1200 Keyboard case	£ 39.95
Windows 95 Keyboard	£ 14.95
Audio Slot Bezel (2 x Phono)	£ 19.95
4-Way IDE interface	£ 19.95
1.76Mb Floppy drive (internal)	£ 54.95

NeMac IV - Directors Cut Exclusive UK distributors!!!



15 minutes of beautifully rendered 3D intro and between level animation. 400Mb data on the CD, 40 levels of shooting mayhem! Any Amiga with hard drive and 68020 or better. OCS/ECS/AGA, Picasso96, Graffiti or CyberGraphX Runs in any Amiga screenmode OS friendly (multi-tasking and quitting).Joystick, mouse, joypad, redefinable keys support. **£24.95**

AWeb-II

The latest V3!! Now with many new features including Frames etc.
New Lower Price! **£29.95**

Blittersoft

6 Drakes Mews, Crownhill Industry, Milton Keynes. MK8 OER. UK.

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technical@blittersoft.com
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EASY

Not at all. Shareware programming isn't easy and the rewards are usually paltry. But, as Ben Vost discovers, they can also be great.



Shareware is one of the defining features of the Amiga. While on other platforms a program for sorting your accounts might cost you a hundred pounds, and a genealogy database might cost you £250, on the Amiga they may well be free, or at least, next to free. In other words, they will be Shareware.



Shareware requestors come in all shapes and sizes. From ones that stubbornly appear every five minutes...

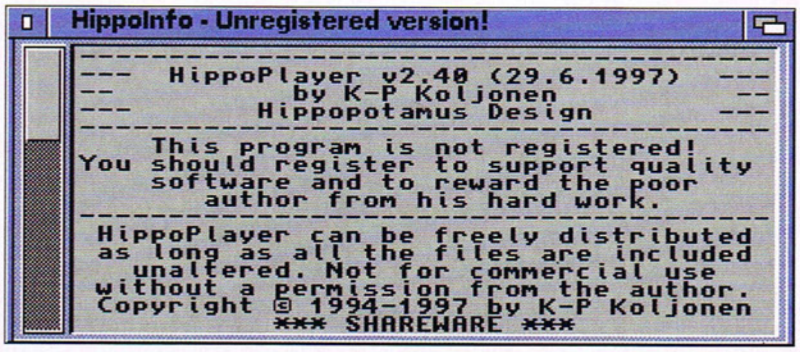
The whole deal with Shareware is that you get to try out some bit of software to see if you like it, you can play with it for about a month, then, if you still like it, you can pay the author a nominal fee, usually less than £20. That either gets you a completely new version that doesn't have things which don't work, or a keyfile to enable features, and sometimes as much as a printed manual or just a letter of thanks from the author, usually along with any newer versions that come along.

Sometimes, Shareware relies on your honesty – if you like a program and want development on it to continue, you pay the author his postcard, his tenner or his bit of chocolate and he says thanks, that's all. The best thing about registering Shareware though is that you usually end up getting every update for free without having to pay any upgrade fees – unusual in the world of software where a longstanding user of a program like *Wordworth* will have paid many times what it will cost a new user to buy a copy.

As I said above, there's a Shareware program for almost anything you can think of, from molecular manipulation to Play-by-email games. If you're trying to use an arcane piece of hardware on your Amiga, chances are that someone else has already tried and left instructions for you to follow, or advice saying you shouldn't attempt it. One of the best things about Aminet, the Amiga's largest repository of Shareware, is that it's very structured. Categories like 'game' are further subdivided into 'game/2play', 'game/jump', 'game/demo' and 'game/board' to name but a few. Furthermore, every file on Aminet has an attached readme – it's a requisite to get your software on Aminet – which usually gives you some details about what the file you're looking at does.

GET ONLINE

If you're not online, then your choice is either to wait for the excellent *Aminet* CDs, or to frequent your local PD library. While some offer direct Aminet downloads, often you'll have to buy disks with several tools in order to get the one you want and need. It all



...to requestors that stop you from quitting a program instantly, every Shareware...

Money?

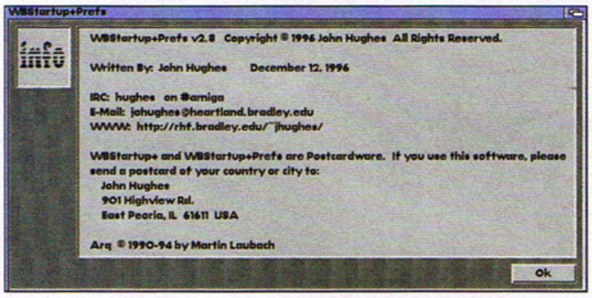
depends on the library you speak to. Alternatively, the *Amiga Format CD* always contains a selection of the very latest Aminet Shareware. We're always willing to put requested material on our CD so if you have a specific request to make, just send us a note, or give us a call.

LAZY SWINE

A lot of people never register Shareware and the usual reasons they give are fourfold:

- They don't trust Shareware authors to send them what they've paid for.
- If they're overseas, then it's too difficult to send them money.
- If they're overseas, that makes 'em Johnny Foreigner who doesn't speak the Queen's English, so if anything goes wrong, you can't talk to 'em.
- They are too tight to pay up.

"The Amiga Format CD always contains a selection of the very latest Aminet Shareware."



...author has his or her preferred way of reminding you that they deserve at least a contribution to their efforts...

Right. Let's take these responses one at a time. Yes, there are a few Shareware authors who are unscrupulous but they have mostly been weeded out and moved onto fresher pastures. Certainly I haven't been made aware of anyone in the last three years or so that has been ripped off by a Shareware author.

Secondly, sending money overseas isn't always easy, but if you are dealing with Germany or the United States, then sending Deutschmarks or Dollars in an opaque envelope by registered post is a pretty safe bet. You can track the money via the post office who'll be able to tell you if the letter was received or not at the other end. Also, a lot of Shareware authors overseas also have UK registration sites. If there isn't one for the program you want to register, have you thought about offering your services in this respect?

Thirdly, Johnny Foreigner can often speak and write better English than some of the correspondence we receive from fellow countrymen in this office. Don't think that just because someone's name is unpronounceable for you, it means that your language is for them.

The last reason, sadly, we cannot help you with. It would be nice if we could sellotape a fiver to the front of *Amiga Format* to encourage you, but it's just not feasible. Sorry.

DIFFERENT WARES

There is a bewildering variety of different types of Shareware. This short list will cover some of the most common types.

Freeware

The author wants nothing for his program except maybe an email to say how nice it is. This is still very common in the Amiga world.

Shareware

The author stipulates that if you like their program you have to pay a contribution after a certain number of days using it to assuage your conscience and give the author some incentive to carry on developing. Shareware can be of the sort that relies on your good nature or the sort that is cut down in some way (Crippleware) or has annoying requestors reminding you to cough up.

Giftware

The author would like to receive something of a non-monetary nature from you. This is often the best type of Shareware particularly if you have to deal with overseas authors, some of whom would accept a gift to the value of rather than a eurocheque that they'll have to pay for to put in their account. Sometimes it's also worth emailing the author to ask if there's anything in particular they're looking for.

Cardware

The author would just like to receive a postcard from your native town. This type of ware is often repeated with maps or stamps or anything that shows a locale.

Charityware

The author wants nothing from you personally, but would like to see a receipt from a charity stating that you have paid the Shareware fee.

Odd-ware

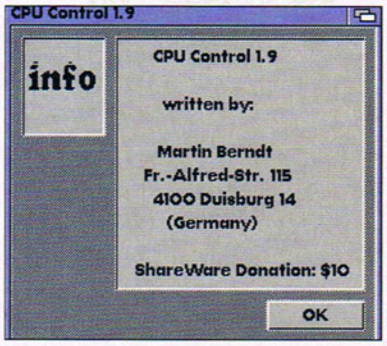
Not really a category, but you get all sorts of odd suggestions like virtual beer-ware where the author would like you to send an ASCII drawing of a foaming pint to his email address, or Chocware, where the author would like you to send chocolate through the post to him or her. The weirdest one I've seen has to be Horoscopeware where the author wanted his horoscope from all the newspapers you could find on the day you sent your registration to him. It's just a shame I can't remember the name of the program now.

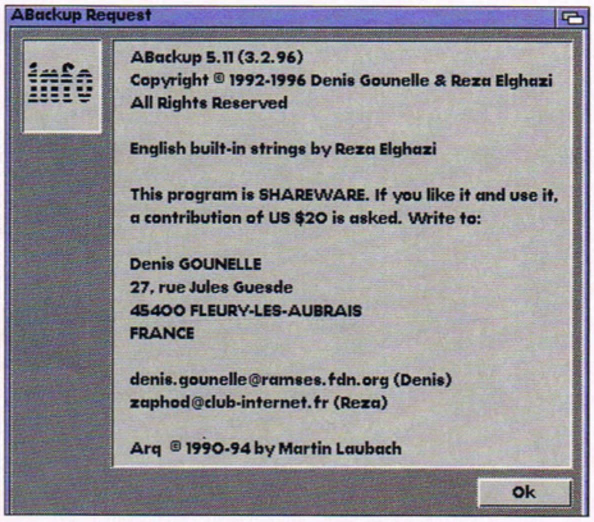
Continued overleaf ➡

It Could be You...

Making sure that you pay up for your Shareware is all very well, but what about getting some cash floating back your way? The answer's easy if you want to be glib – write some brilliant software; make sure everyone has it but is so amazed at its quality that they want to pay you for it; pay all the cheques into the bank. In reality, that first step is probably the hardest – coming up with a good idea for a program. The most useful programs tend to start out as something you need for yourself. *MUI* is a good example of this. If you have a CD-ROM drive, you can read about how Stefan Stuntz started working on it by reading the interview with him that's embedded in the usual Ben Speaks AmigaGuide. For myself, I've only ever written one program, and that was in *CanDo* (since I can't program), to act as a button-based interface for *AmiTCP v3.0b* when I was using that for my Internet access. By the time it reached its last version (1.20), it was quite comprehensive and it only got that way because of user comments.

"The most useful programs tend to start out as something you need for yourself."





...much like street performers who warn everyone not to move away at the end of the performance when they come around with the hat. It's just surprising to us that no Hungarian or Haitian Shareware author has come up with...

SOME IDEAS TO GET YOU STARTED

Here are some Shareware programs that exist on other platforms that we on the Amiga could do with.

WebFree (Mac) – A little tool that stops your browser downloading all those annoying banner ads and more.

ZipMagic (PC) – Universal compression and decompression tool. It works seamlessly with all sorts of compression methods and can automatically create free-standing archives (that decompress when you double click on them) and split archives (over a series of floppy disks, for instance).

Polyview/Graphic Converter (PC/Mac) – Small batch converter/viewer for all types of graphic files.



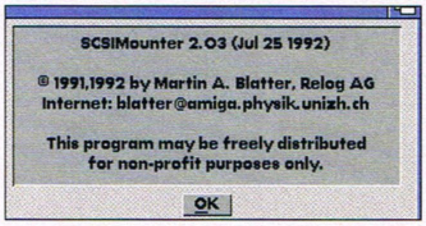
GET BLITZED

The language you use to create your program doesn't matter to some extent, but common opinion is turning against *AMOS* as a tool for creating utilities and applications simply because it doesn't make Intuition-based programs. This means that the standard Amiga Workbench-type windows and file requestors are not available and also that some of the Amiga's multitasking capabilities are limited. *AMOS* programs often don't like working on machines with accelerators, fast RAM or graphics cards, and some won't work on Workbench 3.1. A better choice if you're going to use *Basic* would be *Blitz*. World-renowned as the language which *Worms* was made in, it is also very good

"C has the advantage of being available on many platforms."

at creating more serious programs. What's more, it has loads of support from users, especially online.

If you want to go a stage further, your choices are *C*, *E* and *Assembler* (there are others on the Amiga, but these are usually the main choices). You should probably steer clear of *Assembler* since you'd have to have a real need to write software that needs to go that fast – a game perhaps. While *E* is a homegrown language, it is pretty popular and just slightly easier than *C* to get to grips with. However, *C* has the advantage of being available on many, many platforms and if you want to port your software to another platform, it's probably the language of choice.



...Shareware that gives you a headache if you don't register for a month but which can lead...

When it comes to making your program, the most important aspect of it, for the user at least, is the interface. *GadTools* is the Amiga's native GUI creation tool, but it's hard and longwinded to program. A better choice might be one of the third party GUI libraries like *MUI*, *ClassAct*, *Triton* or *BGUI*. *MUI* offers the most to the user but opinion on it is fiercely divided between those who love it and those who hate it, so tread carefully when you're making your program.

Continued overleaf ➡

ACTIVE SOFTWARE

Active Software, the creators of *NetConnect*, are Vapor's UK registration site. We asked Chris Wiles, proprietor, about Vaporware's products.

AF: Chris, you're the UK registration site for all the Vaporware products. How did that come about?

CW: That is a difficult question to answer. I wanted to sell the Vapor products commercially last year and approached Olli and Mathias who stated that they weren't interested in "going commercial" (they have had dozens of enquiries from Amiga companies, large and small, from all over the world).

At the time, Mat Bettinson was the exclusive UK registration site for the Vapor products. I believed that the introduction of credit cards would generate further sales, Olli asked Mat if he wanted to continue (which he didn't as he was too busy with *CU Amiga*) and I started selling the Vapor products from February this year.

I was very lucky. I had nearly a years worth of online (IRC) conversations and, of course, development of *NetConnect* to gain their trust.

AF: If someone wants to register a Shareware program that you represent, what do they need to do?

CW: They can order via Vapor's superb registration tool which is shipped with every Shareware copy of *Voyager*, *AmFTP*, *AmIRC* etc. This is an automated process and your order can be sent from home without even having to write a cheque, call a company etc.

A customer can also purchase from the online (http://www.vapor.com) registration form, which is secure. Lastly, they can send us a cheque or postal order and we can deal with the whole thing ourselves.

AF: Does Shareware registration represent a significant portion of your business?

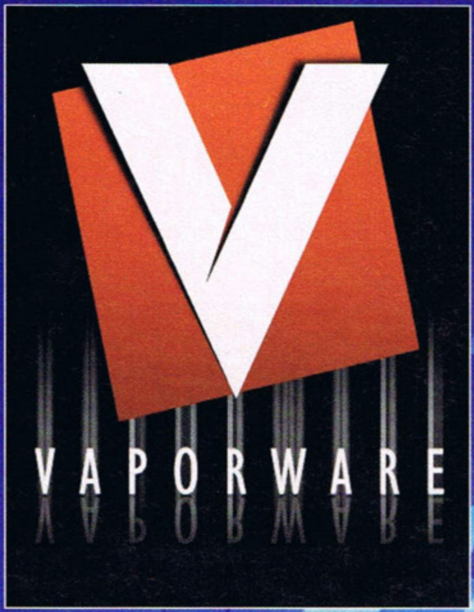
CW: Ha! I think all of us have been surprised just how well the Vapor products dominate the Amiga market. Indeed, Oliver Wagner alone must be one of the most productive programmers I have ever met.

Oliver is a quick and efficient programmer yet he still manages to produce *Voyager*, *AmIRC*, *Microdot-II*, *NetInfo*, *AmigaNCP*, manages Vaporware and even helps our programmers with *NetConnect* related stuff. Certainly sales have exceeded his and our expectations. *Voyager* sales went through the roof last February when *The Next Generation* was first released and it has remained steady ever since. *AmFTP* and *AmIRC* are both consistently excellent performers.

As for our business, we are pleased. With the release 'proper' of *Microdot-II* and the forthcoming *Voyager v3* (with Java support in cooperation with Haage & Partner). Amiga Internet software is looking very exciting.

AF: Would you want to take more Shareware products on as a registration site?

Yes, this is planned. We have been analysing a number of different Shareware products and you may see one or two new Vaporware products by the end of this year. Certainly an ICQ compatible program is a possibility and a WYSIWYG Web editor is currently in production. Outside of Vapor, we also handle *Miami* and SASG products.



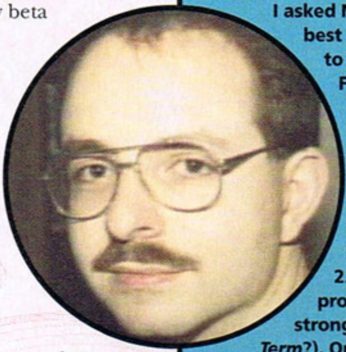


Vaporware make it as easy as possible to register online, but if you aren't on the Internet yet, you can always get in touch with Active Software – the UK registration site for Vaporware.

There's no doubt about it, having an Internet account while you are developing software is a huge boon since it gives you as many beta testers (with as many different configurations) as you need, and you get nigh on immediate feedback on your program. What's more it also gives you a very quick way to disseminate your program to the Amiga masses and a place to publicise it if you have a website. You can even jump to the next stage, as SASG have done, and take orders over the Web. If you haven't set up a credit card dealer account (and it's very hard to do so these days), then an alternative might be First Virtual (http://www.fv.com). They offer a system that's open to anyone with a bank account, that doesn't require a secure server, and that ensures that you'll get paid. The only downside to all this is that if you set up a "Pioneer" account with them, which is the low-end anyone-can-do-it-type account, First Virtual will pay you after a minimum of 91 days. Despite this, it does make it very easy for anyone in the world to give you money for your program.

One more caveat of starting to write your own Shareware has to be originality. If I see another Start bar clone, I'll scream. Not only that, but

...AND THE BEST THING IS IT'S FREEWARE



I asked Marcel Beck – author of probably the best email client that the Amiga has: *YAM*, to tell us why his program is still Freeware.

AF: You are one of the few authors I know that has created a widely-used, program that is Freeware. Why?

MB: 1. For me, there are more important things in life than money.
2. Great quality Freeware (or Giftware) programs have always been one of the strong points of the Amiga (remember *Term*?). Or, as a user recently wrote in the *YAM* mailing list: "Marcel evidently just enjoys having adoring hordes of users singing his praises!"

AF: Any news on when YAM 2.0 will be out?

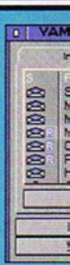
MB: Not before August.

AF: Will you keep YAM Freeware?

MB: All future *YAM* versions will remain freeware (it will probably be the last remaining Freeware emailer for the Amiga – I've just discovered that *AEMail* has become Shareware...)

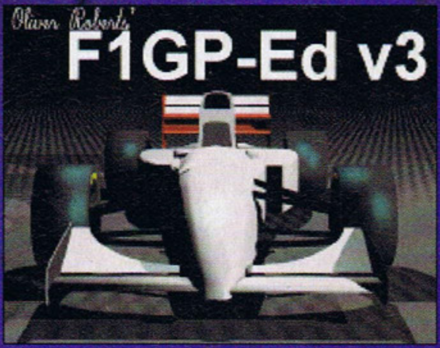


Marcel's lovely hometown of Thun in Switzerland. Aah inspirational!





AN INTERVIEW WITH OLIVER ROBERTS



Oliver Roberts' superb *F1GP-Ed* expands MicroProse's *Formula One* game so much, it's practically a new title!

AF: How and why did you come up with the idea of developing F1GP-Ed?

OR: It was during my first year at Uni. I had just discovered the Internet and found some editors for the PC version of *F1GP*. After hunting around, I was unable to find a similar program for the Amiga, so I decided to have a go at making one myself. I had just started learning C in a course at Uni, so that was the ideal chance to start coding in C on the Amiga. A few weeks later the first ever *F1GP-Ed* was released to about 10 budding beta testers via the Internet. So, that's when it all started. Little did I know that Steve Smith also started writing a *F1GP* editor (*F1Ed*) at the same time – but, that's another story.

AF: How long have you been working on F1GP-Ed now and what new features do you hope to add in the future?

OR: About three and a half years – I started work on it in February 1994. I've got a huge list of suggestions for new features from registered users, but it's hard to say whether I'll ever get around to implementing them. What I can tell you is what will be in the next version... It will be possible to choose whether you want the audio filter on or off, and more importantly there will be a patch to make *F1GP* use the VBR. Owners of 68040/060 Amigas currently need to run some program to disable the VBR so that F1GP will run – this will no longer be necessary. That's all I've done so far, as I'm trying to fix a couple of bugs, but my next plan is to implement a program launcher which will be able to start other *F1GP* programs (e.g. *SplitTime*) automatically and will also offer a GUI to set the command line options.

There is also a possibility that some new/updated circuits could be released, but I'm afraid that is still a long way off.

AF: Has Geoff Crammond ever seen the work you've done?

OR: I have no idea. Getting in contact with Geoff has been mission impossible, so far. I would hope he has seen it and doesn't object to it – after all, I'm sure *F1GP-Ed* has helped improve sales of Amiga *F1GP*, which means more royalties for him.

AF: Do you have any other projects you want to tell us about?

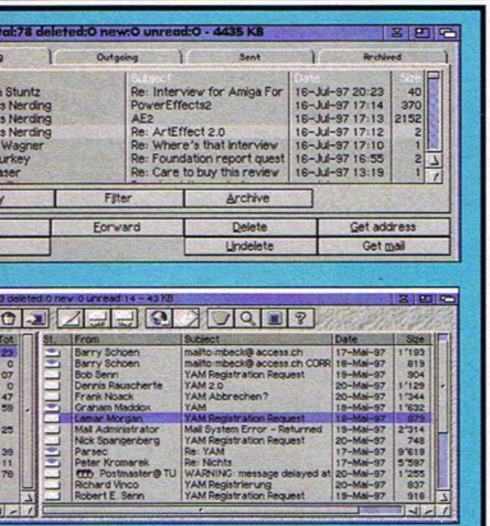
OR: Nope – I'm not really working on anything else. That doesn't mean I don't want to though. I'm just trying to come up with an original idea, or at least a very good idea. Until then I will plod on with developing *F1GP-Ed* and my web sites. I would prefer to write more "serious" software in the future – I definitely don't want to write an editor for any other game.

AF: Do you think that enough people register Shareware and if not would you consider stopping development?

OR: No. To be fair, *F1GP-Ed* has had about 1500 registrations which is far more than I ever hoped (I thought I'd be lucky to get 100 when I first started). However, the fact is that the majority of people don't register, which really is a shame in the case of *F1GP-Ed* as they're missing out on a lot. When I stop developing *F1GP-Ed*, I can confidently say it won't be because of lack of registrations.

There's also the problem of piracy. I'm aware that illegal cracked copies of *F1GP-Ed* have been made available in the recent past, and no doubt they still are, which is a great shame. Unfortunately, there's not much I can do about it without harming legitimate users. In many cases, pirated copies of Shareware software will not work properly and will have bugs that weren't originally there. It is important that people are made aware of this – in my opinion, pirating Shareware is an even lower act than pirating commercial software.

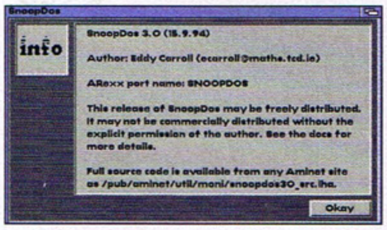
Name: Oliver Roberts
Age: 22
Normal Occupation: Computer programmer (currently unemployed)
Number of registered users: about 1500
EMail: oliver@poboxes.com
WWW: http://www.nanunanu.org/~oliver/

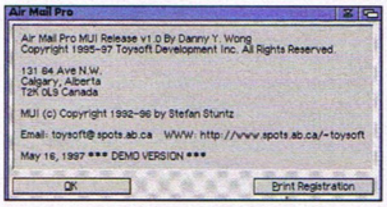


The current version of *YAM* (above) and version 2 (below) – coming soon!

how do you choose between them to decide which one will get your cash. If you come up with something original (on the Amiga that is – other platforms can make a very good source of inspiration for Amiga Shareware) you'll corner the market and get more registrations.

So, you've written some software, you've got your website and email account sorted, you've paid First Virtual their ten dollars startup fee – what next? Well, in your effort to publicise your program, you'll want to upload it to Aminet (and make sure you give it a good short description) and send email to Kevin Hisel – the webmaster for the Amiga Web Directory (http://www.cucug.org/Amiga.html), the resource for news hungry Amiga owners. Next up, it might be worth your while emailing people like us at *Amiga Format* (bvost@futurenet.co.uk – don't send the program at first) to tell us about your creation and ask if we would like a look at it.





...to sudden and inexplicable death if it takes you longer. Death by fish, for example.

INTERVIEW WITH STEFAN STUNTZ



AF: Stefan, when did you come up with the idea for SASG?

SS: The Standardised Amiga Shareware Group was founded in early 1994. Most Amiga users will remember this time as the downfall of Commodore. SASG was born out of this crisis because we wanted to show our solidarity with the Amiga and its users worldwide. We knew that the liquidation of Commodore would not simultaneously mean the downfall of the Amiga computer.

We also realised the urge to facilitate the Shareware registration process for both author and end user and to offer an unprecedented service in the Shareware scene. We felt that Shareware has great potential – now more than ever due to the precarious situation of the Amiga – so we wanted to revolutionise the Shareware idea by giving it an upswing.

AF: Is SASG doing anything for its third birthday?

SS: Our third birthday is celebrated with several unique offers on our Web site, including discounts for magazine readers and a Shareware lottery. In this respect, SASG is pleased to offer any *Amiga Format* readers that have Internet access a 20 per cent discount on any SASG program registered through our website at http://www.sasg.com. To qualify for the discount, the user will have to connect to our site, go to the order form and enter the following password in the respective gadget in the discount box:

dewback

If you are not connected to the Internet yet or do not own a credit card and thus cannot order the SASG products online at a discounted price, you can still register the old-fashioned way: Send £15 cash or cheque to our UK representative Paul Jewell, 7 Fairfield Av, Cardiff CF5 1BR.



The SASG website where *MUI*, *MagicWB* and the other SASG titles can be registered immediately – with a 20 per cent discount for *Amiga Format* readers.

Even though the overall situation with the Amiga has constantly been quite unclear, a lot of positive user feedback during the last years encouraged us to continue and to enhance our services. And the users were right: Shareware is now more important to the Amiga than ever before.

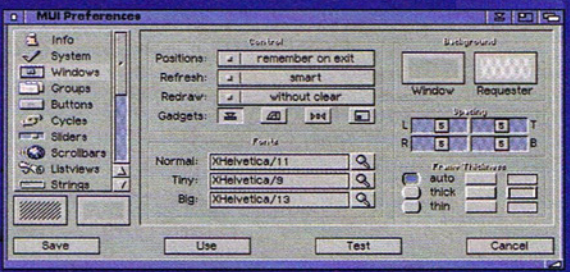
AF: Will you augment the membership of SASG with more Shareware authors?

SS: We are always looking for new products and new authors to cooperate with. This does not necessarily mean new SASG applications, we also work closely together with other Amiga Shareware distributors such as Vaporware (*Voyager, AmIRC, AmFTP*) by offering discounts and simplifying registration mechanisms.

AF: Do you have further plans for SASG expansion?

SS: Certainly. Our online service at http://www.sasg.com which offered complete electronic Shareware registration for the first time was a major enhancement. Turnaround times for ordering and delivery changed from weeks to just a single day. We are currently working on speeding this up even more, to be able to deliver our products within just minutes of ordering.

The Internet has great potential for Shareware authors and we plan to enhance our online presence and offer more information and new services in the future. For Amiga users without a modem, we are currently thinking about enhancing our registration site structure by cooperating more closely with local Amiga dealers and magazines.



MUI has altered the face of many an Amiga, and is indispensable for some programs.

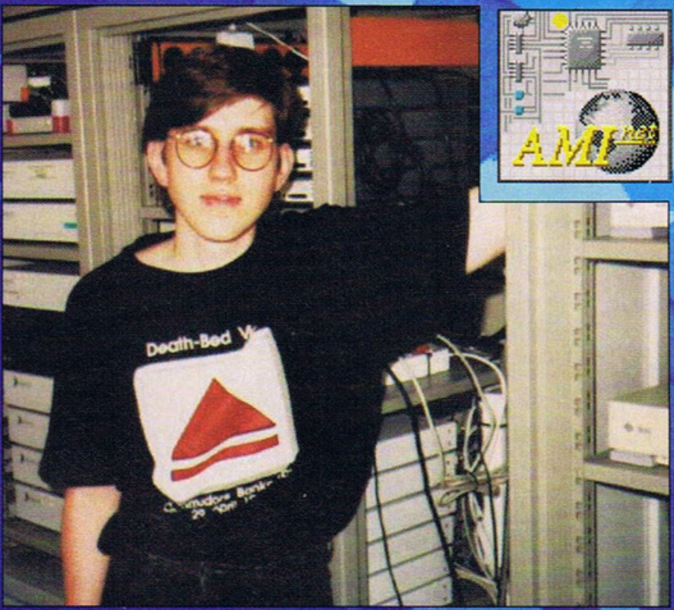
Continued overleaf ➡

THE AMINET PRINCIPLE

Aminet is the world wide archive of freely distributable software. It runs on several machines around the world which anyone on the Internet can have access to. If you don't have Internet access, Aminet is cunningly made available on CD-ROM in bi-monthly doses, each CD offering as new as possible software. Aminet is now to Shareware what the Fred Fish collections once were, and more. We talked to the master of Aminet Urban Müller:

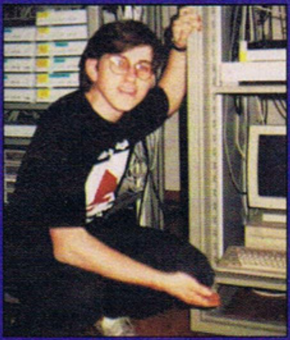
AF: How long have you been running Aminet?

UM: Over five years. Sheesh, that's a long time. Actually, it wasn't called Aminet in the beginning, when it was a single Amiga 3000 UX storing freely distributable software; we only named it that when other computers on the net started mirroring (maintaining copies of) the collection.



Urban Müller surrounded by computers at the Swiss Aminet mirror site.

AF: What makes Aminet unique amongst Internet software archives like info-mac and Simtel?



UM: Completeness. I can't really take credit for that (as Bill Gates can't take credit for the success of Windows) but everything that's available on the Amiga ends up on Aminet. So you don't have to go looking all over the place to see what's new. As a side-effect, Aminet has become the world's biggest Freeware/Shareware archive for any computer, its 10 gigabytes are, for example, three times bigger than info-mac (the Mac's largest archive). But what really made Aminet work in the past wasn't the contents it had but the *information* about its contents. It gave you a chance to quickly decide on what you wanted to download in the first place. Only later, did other archives come up with similar aids.

"I was spending a couple of hours a day on it... and tens of thousands enjoyed it."

AF: Do you think that Aminet has changed the way people use their Amigas?

UM: I hope so. Aminet offers a unique chance to the Amiga user: every Amigan can make his creations available to every other Amigan very easily. So if there's one guy out there who has had the same problem as you, you'll find the solution on Aminet. And, because so many people benefit from free software, lots in turn feel obliged to do something for the community. This is what really keeps Aminet (and the Amiga) going.

AF: Have you considered putting registered Shareware on the Aminet CDs as an added incentive rather than commercial software?



UM: Actually, this has happened in the past: there is a registered version of *DeliTracker*, a superior module player, on *Aminet Set 2*. And on *Aminet 20*, we'll see *WildFire*, a 3D animation editor. However I understand that many Shareware authors don't get what they deserve, in my opinion due to the hassle of sending small amounts of money across the globe. Electronic cash would certainly help here.

AF: What makes you work on Aminet? Do you get paid for updating it constantly?

UM: For the first three years, I wasn't paid at all. What kept me going was knowing how many people appreciated my work. Hey, I was spending a couple of hours a day working on the archive, and tens of thousands enjoyed it. That's what I call efficient. Now that I also make CDs of the archive, I receive a license fee for every CD sold, which allows me to go on maintaining the archive now that my ETH studies are finished.

AF: ETH, isn't that where Niklaus Wirth, inventor of Pascal and Modula, teaches?

UM: Yep, I learned compiler construction from him. I really enjoyed my time there (though the first two years were totally off-topic), but I guess the most important thing the university did for me was to provide me with free Internet access. Now we're talking 1989 here, and nobody (including me) had ever heard of the Net back then.

AF: What next for Aminet?

UM: I have a new mirror script generation in the works that will make it very, very easy for people to install a mirror. It will also enable me to remotely change the Web interface on the mirrors, which is not possible now (that's why the interface looks a bit old-fashioned). I also hope to integrate some more user feedback; people should be able to attach their comments to uploaded programs.

Another thing I have considered is separating the MODs from Aminet. I can present them much more nicely that way, for example you should be able to play them using a single click in the Web interface.

Finally, I plan to get the Aminet interface to only show those areas that you are interested in. We're in the very fortunate situation of having too many uploads rather than too few, so if the computer can sort out areas that you want to see squelched, it can save you a lot of time.

Yeah, I know, it doesn't sound very revolutionary, but the days of big steps ahead are really over once you have got a relatively decent archive. And, in my humble opinion, that's exactly what Aminet is.

RTG

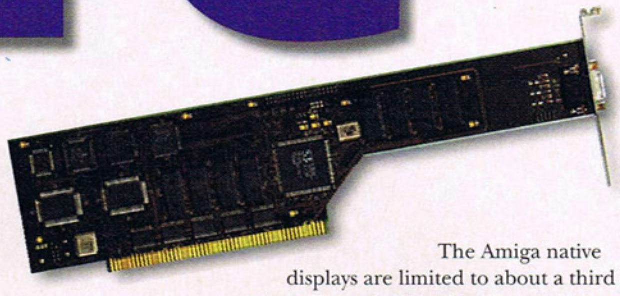
***Picasso* versus *CyberGraphX* – Simon Goodwin assesses the state of the art in retargetable graphics software.**

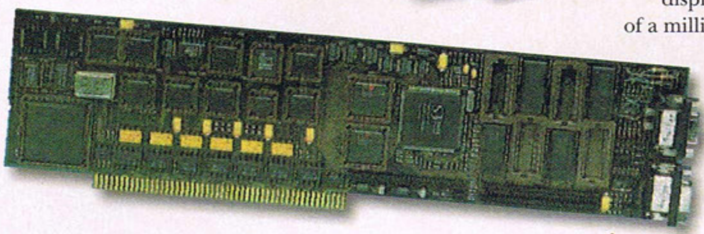
There are many brands of graphics card for the Amiga, all claiming advantages over Commodore's built-in chips and giving higher resolution and more colours.

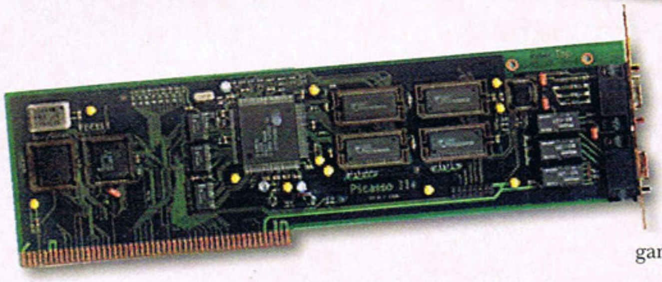
The Amiga native displays are limited to about a third of a million pixels before they start to flicker. A decade ago this was reasonable, making the Amiga well suited to TV and video work. But now computers use custom-made monitor displays, the Amiga does not make best use of the new screen modes.

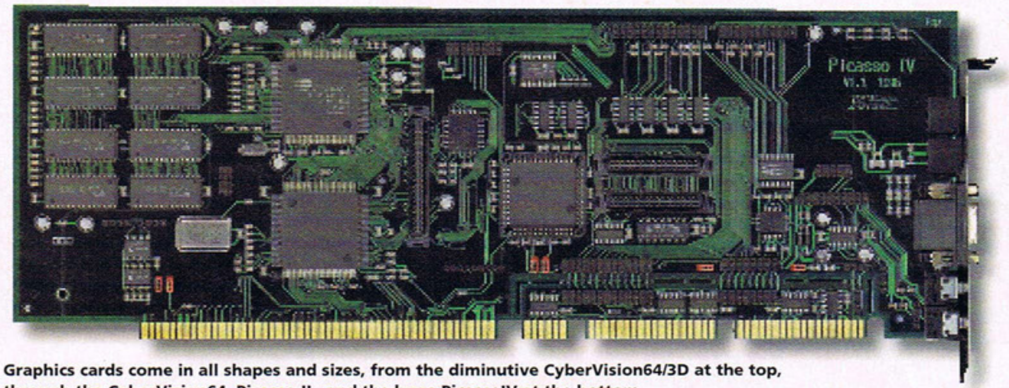
Graphics cards offer thousands or millions of colours, so that several programs can share a screen without competing for a limited number of colour 'pens'. 'Chunky' display modes store all the bits for each pixel together, which makes life easy for 3D games, PC and Mac emulation. It's not all good news. When you switch to a graphics card you forfeit Amiga specialities like overlapping sprites and dual playfield (overlaid) displays – but you gain speed, resolution, colours and reduce flicker. For many graphics enthusiasts this is a worthwhile trade-off, even if it means icons and screens move a little less smoothly.

Whatever the resolution, a graphics card is useless without software. The first cards came with custom code, but as cards proliferated programmers looked for a standard way to drive them, regardless of manufacturer, and Retargetable Graphics (RTG) was born. The block diagram shows, in a simplified way, how RTG fits in with existing Amiga software.









Graphics cards come in all shapes and sizes, from the diminutive CyberVision64/3D at the top, through the CyberVision64, Picasso II+ and the huge PicassoIV at the bottom.

MIXING MODES

You can only use one RTG scheme at a time, and your Amiga will get upset if you have two configured simultaneously. This is a pity, as they have unique advantages and it would be nice to select the one best suited to your current project. Sometimes draggable screens might be more useful than multiple HighColour modes.

After much experimentation I've found a reliable scheme to move back and forth between *Picasso96* and *CyberGraphX*. The snag is that you need to reset en route, as there's no other way to clear out one scheme to make room for another.

If you want the best of *CyberGraphX* and *Picasso96*, you need to swap the monitor icons in DEVS:MONITORS and select a previously saved screen mode for the next RTG scheme you wish to use. Suitable scripts are on this month's CD; they require you to copy your drivers and icons to STORAGE and the local directory.

Some programs store their default screen mode, which can cause problems. *Final Writer* fails to start if the preset mode is no longer available. The cure is to delete (or rename) the file FWfiles/FW.Prefs to restore the default – so the program asks you to select a mode when you start it – and save your new preferences later.

If you need to convert screens into graphics files, options depend on the RTG driver in use. *PicassoPhoto* grabs HighColour and TrueColour Picasso displays; *CyberGrab* works on new RTG modes. Older hacks, like *Lens* and *Magic Layers,* support Amiga modes but not RTG; compatible alternatives include *MKS_Lens* and *MultiCX* 'opaque' settings.

HIT THE METAL

Old programs may use the Amiga graphics library or access the display hardware directly. RTG utilities like *ChangeScreen* intercept calls to the libraries, patching in the screen mode requestor to divert displays to the RTG system. This only works if the software does all its work with system calls, not 'hitting the metal' directly like many games. Retargetable software is not optimised for a particular screen format, as old Amiga software often was.

New 'system friendly' Amiga programs support the screen mode requestor directly, so they can use either Amiga or Zorro graphics. When a graphics card mode is selected, system calls are directed to the RTG library.

Programs like *CyberWindows* and *PicassoPhoto* only work with a graphics card. These 'retargetable applications' expect colourful public screens and use a new RTG API interface. This allows software for, say, CyberGraphX to work with Picasso96, even though the RTG library and drivers differ.

DRIVERS

Low level drivers communicate with each specific graphics card and drivers are available for most cards. If you own several compatible graphics cards you can use them all at once.

Commodore made some late efforts to promote RTG but the need for compatibility limited their room for manoeuvre. Workbench 3 introduced monitor icons which can be shuffled around the desktop to configure a system. New monitor icons make extra display modes available.

Third-party RTG schemes add support for more colours, multiple

monitors and 'chunky' displays which can be manipulated dot-by-dot more efficiently. These required new libraries and programming techniques. This article compares three sets of libraries – *CyberGraphX*, *Picasso96* and VillageTronic's original Picasso software.

For test purposes I used a Picasso II+ board, with 2Mb of graphics memory. The exact hardware is largely irrelevant to RTG. Your card determines the rate at which the display can be refreshed; everything else is up to the software. Picasso II+ is cheap, readily available and uniquely well supported with software drivers. PicassoIV and CyberVision64 are its main rivals: newer, faster and more expensive.



CyberWindow can put several full-colour images on a 24-bit Workbench without compromising the colours.

CYBERGRAPHX

CyberGraphX began as a Shareware product and the free version has restricted modes which mean that you really do need to register. My 1960 monitor gave a crazy rolling screen at 1280 by 1024 pixels – 43Hz is too slow for it, let alone 29Hz!

Apple-style 15- or 24-bit modes are missing, so you must register before using 'true colour' or 'high colour' Mac emulation. Once registered you can make your own modes in-between these, customised for your card and monitor,

"Whatever the resolution, a graphics card is useless without software."

trading colours, vertical and horizontal resolution against memory and scan speed. *CyberGraphX* uses 'chunky' modes, allocating at least eight bits per pixel regardless of the maximum number of colours you select, so there's no speed or memory advantage from selecting fewer than 256 colours.

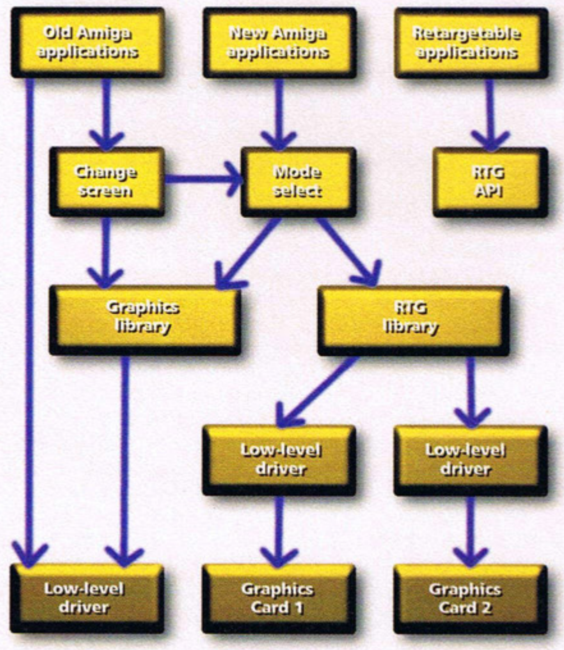
Versions started at 40.23. I tested version 40.49, from *Aminet CD 7*, updated to version 40.62 from the *Utilities Experience CD*. The latest versions are only available commercially, and so far *CyberGraphX v3* only supports Phase5's CyberVision 3D card.

CyberGraphX screen swapping is slow by Amiga standards, taking about a second as the display is copied in and out of card memory every time. Screen dragging works just as in Amiga modes, with the other screen stretched or squashed in the background: select a 320 by 240 pixel autoscroll Workbench, and pull down an 800 by 600 *Directory Opus* to see Workbench in miniature – with *Opus* colours – at the top.

Poor palette handing gives the game away, and some combinations of modes are banned; Picasso II+ can't show Amiga and graphics card output simultaneously, and *CyberGraphX* doesn't allow 65536 and 256 colour modes to be overlaid. In general, RTG systems cannot combine displays from more than one adapter, so if you drag an RTG screen down it only reveals other RTG screens on that card.

Amiga screens can be dragged as usual, but you can't pull them down to reveal *CyberGraphX* underneath. Full screen swapping causes a momentary glitch as your monitor adjusts to the timing of the new display.

CyberGraphX is shaky when running two 65536 colour screens at a time, especially in early versions. Changing into and out of these modes, or launching a new application in 640x480x64K mode is uncomfortably like Russian roulette. *CyberGraphX* ignored scrollbar dragging in 16-bit VGA mode, but it worked in 256-colour mode. Luckily the scroll arrows remain usable. After a while you learn not to push it too hard – for safety, stick to one 16-bit screen at a time.



Block diagram of Amiga Retargetable Graphics

PICASSO

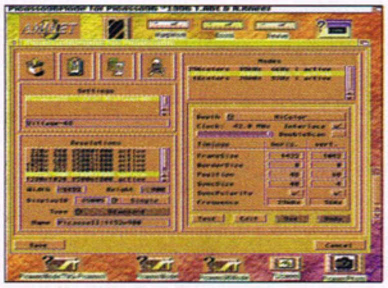
Picasso II+ ships with VillageTronic's original Picasso libraries, rather than *Picasso96*. You get three disks, the third holding the *MainActor* animation tool. The strengths of the original Picasso drivers are the software support, built up over years. It comes with a bigger bundle than any of the 'new' systems.

A Picasso screen blanker is included and a hotkey to swap between Picasso and Amiga display output. *ViewBMP* lets you examine graphics from Windows and OS2, while *ViewJPG*, *ViewTGA* and *ViewPCX* support other common formats. *ViewPNM* decodes Unix portable bitmap formats. Unlike *MultiView*, these allow more than 256 colours.

Modern graphical programs have a mode requestor which lets you select your preferred display format. The bundled *ChangeScreen* utility adds this option to older software, popping up and inviting you to substitute a new mode when programs start. This doesn't always work, and can be annoying till you've trained it to recognise your programs, but it's better than being forced into PAL interlace every time!

Other Picasso II goodies on Aminet include *ShowJPEG* and *ReadBMP*, *FLIcasso*, an FLI animation player and *APM*, which remaps Picasso RAM as Zorro 2 'fast' memory.

The original Picasso software was rather buggy, but the current version is



Picasso96 lets you configure two or three modes for each resolution.

solid. *Shapeshifter* display updates corrupt Amiga screens, requiring a redraw when you switch back. If this bothers you, *MultiCX 2* includes a corrective patch. I noticed the same problem with the *CyberGraphX* driver, but not on *Picasso96*.

15-, 16- and 24-bit modes are supported by VilIntuiSup.library, as Commodore's graphics library is limited to eight bits per pixel. The standard Picasso driver for *Shapeshifter* is very slow in HighColour and TrueColour modes. Picasso software supports 'planar' displays in graphics card memory, saving time and memory for screens only needing a few colours.

PICASSO96

Picasso96 is VillageTronic's Freeware RTG system, introduced last year, supporting other brands of graphics card as well as VillageTronic's own Picasso series. Like *CyberGraphX* it's a true RTG system, allowing programs to run irrespective of the exact display hardware. It mimics the *CyberGraphX* API; all the *CyberGraphX* programs I tried worked with *Picasso96* too.

Picasso96 is supplied with programs to select screen modes and *FLIP96*, a player for the FLI animation format. Early versions of *Picasso96* had problems with *Final Copy* and *Final Writer* – the upgrade to 1.16 cures this. It still struggles with Workbench menus on HighColour or TrueColour modes, leaving a mess on the screen when a menu disappears.

Picasso96 needs less memory than *CyberGraphX*. It leaves screens in card RAM if possible, while *CyberGraphX* copies in and out of fast RAM. An 800x600 pixel 256-colour screen needs almost half a megabyte, so this can make a difference in a busy system. Graphics boards may increase your total RAM, but typically they reduce the amount available for programs.

The effective limit on active screens is total RAM, rather than board RAM, which just limits the number of pixels and colours that can be displayed simultaneously. Either way, extra fast RAM comes in handy, although you'll have lots more chip RAM for samples, floppies, datatypes and MUI, once screens migrate to your graphics board.

Picasso96 insists that Zorro 2 graphics cards like Picasso II use linear addressing, monopolising one or two megabytes of scarce 24 bit address space. This is a limitation if you've got 8Mb of 16-bit fast RAM.

Picasso96 screens cannot be dragged up and down like Amiga screens. Screen swapping is much faster than with *CyberGraphX*, although not as quick as with Commodore's chip set. Graphics cards do not change the palette on the fly like an Amiga – images behind the front screen use false colour which makes them hard to read.

Interactions between display and audio timing improve Amiga sound – allowing sample rates up to 56KHz – if the Amiga is switched to a Multisync display mode, even if you're not looking at it. *Picasso96* does this automatically, doubling the maximum sample rate for chip audio. Similar hacks exist for *CyberGraphX* and *Picasso*, but I couldn't get those to work.

There's nothing to stop you using more than one display at a time – indeed, it's difficult to set up a CyberVision 3D card without two monitors! – and sometimes it's convenient to be able to see Amiga and graphics card displays simultaneously. Both *Picasso96* and *CyberGraphX* support multiple graphics cards. Your pointer jumps between monitors as you select displays on different adaptors. You don't get the seamless integration of the Mac, where you can slide the pointer across the two monitors, or see two views of the same document in adjoining screens.

"The original Picasso software was rather buggy, but the current version is solid."

CONFIGURATION

There's a general problem with Amiga screens, which is that they're displayed later – hence further to the right – than screens from most graphics cards. Some of the margin time is taken up with memory refresh, sound and sprite generation, so it's hard to find settings that suit all available modes on a given monitor.

Just as you need to twiddle the settings to adjust a new monitor for best results, graphics cards require configuration. You'll probably need to adjust the monitor too, and perhaps your Amiga modes, for the best compromise. Modern digitally-controlled monitors definitely have the edge here, storing settings for each scan rate and selecting them automatically as you change mode.

The Amiga Overscan preferences give limited control over display size and position, but the PD utility *MONED* can do much more, with the attendant risk that you'll push the monitor too far. The *CyberGraphX* equivalent, *CVMode*, is poorly designed and difficult to use. Although it works (most of the time), there are loads of numeric parameters which interact with the monitor's own defaults in a confusing way.

***Picasso96Mode* is friendlier, but can also crash the machine, either by extinguishing the display or disrupting the processor; in this respect it is rather worse than *MONED*. Save regularly and it's worth it, because you can define up to 23 custom modes tailored for your card and monitor. With all this software, there's a remote risk that an inappropriate scan rate might damage your monitor, but prompt action, usually with the software's own reset button, reduces the chance.**

***PicassoMode TNG* (The Next Generation) is a more interactive mode editor which supports Picasso II, Picasso IV and Spectrum cards, so far. It builds on the original *PicassoMode*, and has more options than the old one, but is still unfinished. It looks neater and lists presets for five generic and about 50 specific monitors, including ones from Gateway and Escom, but none by Commodore! That's a pity as the 1960 I, and many others, use doesn't fit any of the generic presets.**

***TNG* works like a file utility – you select and copy modes by resolution and scan rate from a list of presets to an 'active' list. Later you can twiddle the number of pixels and colours, horizontal and vertical sync timing and polarity.**

ACRONYMS

AGA – Commodore graphics hardware in Amiga 1200 and 4000 systems, compatible with ECS and OCS in older Amigas but allowing more colours.

API – Application Program Interface. A set of system calls which allow programs to work consistently regardless of the underlying software or hardware.

ECS – Enhanced Chip Set. Commodore graphics hardware in most Amiga 500 and 2000 systems, compatible with OCS but allowing more pixels on each display.

NTSC – National Television Standard Commission. The colour (just) TV system used in Japan and the USA; also cynically known as 'Never Twice Same Colour'.

OCS – Original Chip Set. Amiga graphics hardware fitted in the old A1000 and early A500 or Amiga 2000 systems.

PAL – Phase Alternate Line. The colour TV system used in the UK and most of Europe.

PIXEL – Short for PIcture ELement: a single point of light on the display.

RTG – ReTargetable Graphics. Extensions to the Amiga graphics system which allow non-Commodore hardware with increased colours to be programmed consistently.

SECAM – The French TV standard, similar to PAL but potentially higher in resolution. Jokingly known as 'System Essentially Contrary to the American Method'.

VGA – Video Graphics Array. IBM display scheme using twice the number of lines – and hence double the scan rate – of a TV display.

BENCHMARKS

We tested AGA and the three RTG schemes with *IntuiSpeed*, an Intuition timer bundled with Picasso II+. The graphs summarise results for 11 tests, after hundreds of runs on 68040 and 68060 Amigas.

The first graph shows how Amiga planar graphics slow down as more planes are used. 100 per cent is the time for a two colour flicker free DblPAL Hi-Res screen. Times for ECS PAL interlace, Super72 and Productivity modes are similar.

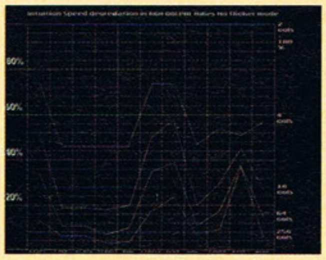
The blitter must make one pass for every plane; if there are lots of planes video data output slows blitting further. PAL interlace output is slower – hence the flicker – so it degrades less. These window scrolling tests work by copying data. Hardware scrolling is virtually instantaneous, but only works for images that fill the full screen width.

'Picasso RTG performance' rates the *Picasso II* software in the same modes, again with AGA 2 colours as the 100 per cent reference. RTG is typically fastest in 256 colours, while AGA gets slower as planes are added. *CyberGraphX* only supports chunky modes.

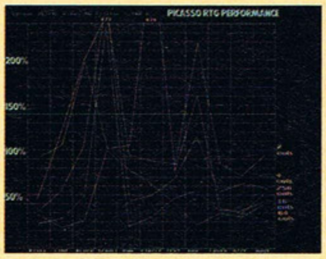
The third graph compares *Picasso96* chunky and planar modes. 64K 'high colour' mode almost matches 256 colour mode. In two colours *Picasso96* trails *Picasso II* and AGA. 24-bit TrueColour brings up the rear, but *P96*'s optimised chunky circles still runs rings around AGA.

The last graph compares *Picasso II*, *Picasso96* and *CyberGraphX* RTG, all in 256-colour, 800 by 600 pixel mode. Here the original *Picasso II* is the 100 per cent base line. *CyberGraphX* plots single pixels fastest, and *Picasso96* has the edge in window movements and sizing, but there's not a lot between them in this mode.

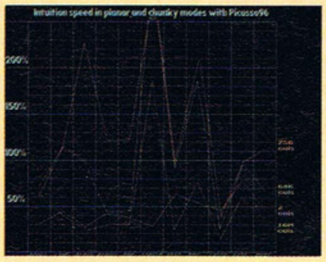
Don't assume RTG software is dormant when you're using an Amiga mode. AGA pixel and circle operations take around fifty per cent longer with *CyberGraphX* loaded, as system patches to boost RTG slug the original Amiga code. For accuracy, disable RTG and reboot before timing Amiga graphics. The degredation is about five per cent with *Picasso II*, and ten to twenty for *Picasso96*.



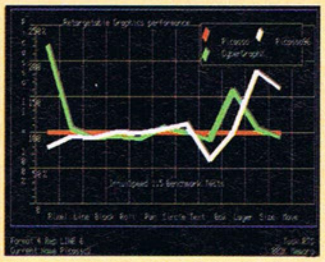
Extra planes cost time – in 4 colours, speed is roughly halved.



***Picasso II* struggles in 16 and 64 colour modes.**



***Picasso96* favours chunky 256 and 65536 colour modes.**



Swings and roundabouts in chunky 800 by 600 pixel modes.

CONCLUSIONS

CyberGraphX supports draggable screens and has the edge on text and pixel operations. *Picasso96* is faster on other tests and needs less memory – but most versions require Workbench 3.1 rather than 3.0. Both have bugs but are in continuous development and work well once you're aware of their limitations. Some Workbench 3.0 bugs are fixed in Workbench 3.1, so RTG tends to be more stable with the latest version of the operating system.

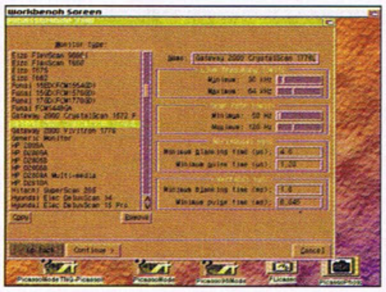
The old *Picasso* software supports screen dragging and specially written drivers but it's overshadowed by the new RTG systems, limited to one card, and will inevitably fall further behind. Unfortunately though, you're stuck with it if you run the board in segmented mode because your ZorroII space is filled with 8Mb, or you're hanging around WB2 or a 68000.

If you've got one of the very latest cards your hands are tied. *CyberGraphX* does not support PicassoIV, and *Picasso96* disdains CyberVision 3D. This may change, if the respective publishers exchange hardware, but don't hold your breath. Meanwhile this article may help you choose between the two, in view of their software details, but hardware considerations – like scan conversion and pass-through modes – may outweigh those.

"Picasso96 is faster on other tests and needs less memory, but requires Workbench 3.1."

The compatible API means that many RTG utilities work with either system. Users of older boards, like GVP's Spectrum, Picasso II(+) and the CyberVision64 have the best of both worlds, and they're both pretty good.

Third party developers can certainly use the *CyberGraphX* API with confidence, now they know that it is supported by two independently-developed sets of hardware drivers. This really does make it a genuine new standard, encouraging the release of truly portable RTG applications. AF



VillageTronic's third try at a mode selector, PicassoModeTNG, contains over 50 ready-made monitor definitions.



Once you've selected a monitor you can customise its modes further.

GRAPHICS MODE GLOSSARY

Chunky – graphics mode where all the bits for a given pixel are stored together in memory.

DoubleScan – duplication of display lines so that a PAL or NTSC display can be shown at twice the normal scan rate (e.g. VGA rate)

HighColour – graphics mode with thousands of colours available for any pixel; typically 32768 shades (15 bit) or 65536 (16 bit).

Interlace – alternation of lines in consecutive displays, giving twice the vertical resolution at a given scan rate, but introducing flicker.

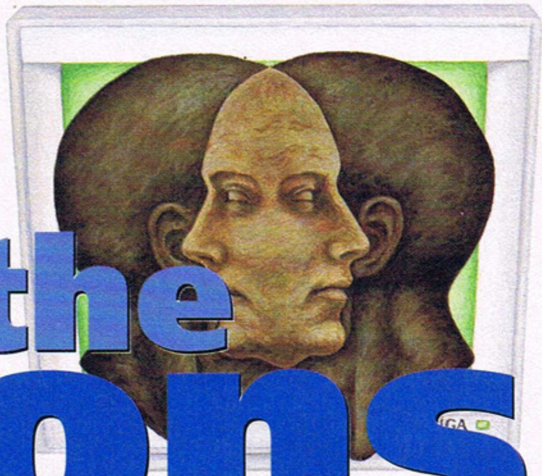
Planar – graphics mode where each pixel's colour is determined by corresponding bits in several distinct 'planes' of memory.

Scan Rate – the number of display lines output per second; typically 15 KHz for broadcast video (15 thousand lines per second) and 30 KHz or more for monitors.

TrueColour – graphics mode with millions of colours available for each pixel – usually 24 bits of colour, giving over 16 million shades.

AFCD16:-In_the_Mag-/Emulators

ON THIS MONTH'S CD



Enter the Dragons

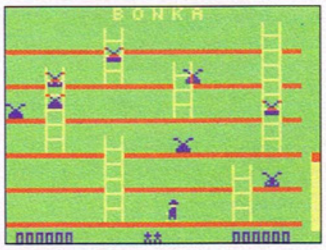
Simon Goodwin surveys emulators for Dragon and Tandy micros.

Before the IBM PC, long before the Amiga, three companies dominated personal computing. Commodore and Apple we've met here before but the third – Tandy – may come as a surprise. Tandy not only had their own best-selling machines, they were successfully cloned by other firms, with a little help from Microsoft. Today, they can all be emulated by your Amiga.

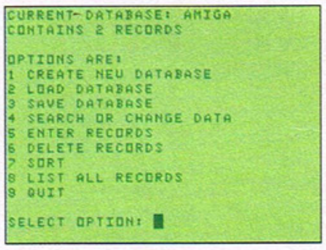
This column examines Motorola's own contributions to the home computer market, and the Dragon range, among the best-selling British-made micros of the eighties. We focus on emulators that run code for the 6809, Motorola's ultimate 8-bit processor, launched shortly before the 68000 which eclipsed it.

The 6809 outclassed earlier 8-bit chips, but it arrived late and short of software to make really good use of it. Nonetheless it's a lovely chip to program, and Motorola released a Freeware 6809 cross-assembler which runs on the Amiga. 6809 features which mark it out from the 8-bit herd include hardware multiplication, position independent code, multiple stacks and index registers, and an orthogonal mix of 8- and 16-bit operations.

The 6809 was used on business systems running FLEX and home computers from Tandy and Dragon Data. Tandy's Colour Computer or 'CoCo' range boasted colour graphics and sound from other Motorola chips. It was soon expanded from 4K to 16K and eventually 64K of memory.



Four colour chunky platform fun in the Tandy game *Bonka*.



This simple database shows the limitations of Dragon text displays.



***Return of the Jet-I* – it moves well but is unconvincing in static screens.**

CoCo graphics are unexceptional, with a top resolution of 256 by 192 in two colours – like a Spectrum – falling to a chunky 128 by 192 in four colours, chosen from two fixed palettes. The 32 by 16 character mode allows eight foreground colours on a two-by-two-block grid, but lacks lower case; shifted letters appear in reverse video.

The Dragon, made in Wales from similar Motorola blueprints, is much like the CoCo. It has a parallel rather than serial printer port, and a better-made keyboard. Introduced with 32K RAM, later boosted to 64K, it was a big hit in the UK when stocks of other micros ran short in the early '80s, but struggled later.

DRAGON

DREaM is an impressive first release from Sean Siford. *DREaM 1.0b* is Freeware, and runs on all 32-bit Amigas. It multitasks in about 300K of fast RAM and 50K of chip.

There are two versions of *DREaM*. One uses Copper List tricks to boost graphics speed; the other does things the hard way. You need the latter if you're running mode promotion or have no TV-style 15KHz display.

DREaM was written on an A500 with an add-on 20MHz 68020, and is said to run at full speed on that configuration, updating the screen at about 17 Hertz – a third of the full speed. You can adjust this, and the timing of interrupts and text updates, with Workbench sliders.

On any A1200 with fast RAM *DREaM* comes close to full speed, indicating the quality of the hand-coded 6809 emulator. On an A4000/040 with the screen update at a full 50 Hertz *DREaM* rates twice the speed of a real Dragon or Tandy Colour Computer, held back only by Commodore's slow motherboard RAM. On a Cyberstorm Mark 1 it manages eight times the speed of a real Dragon!

There's no way to slow *DREaM 1.0b* down; even on a quick 68030 some programs are too fast to be usable. You might also want some of your CPU time left for other tasks, rather than squandered in frantic 6809 emulation.

COVER CD

This month's *AF* cover CD contains ready-to run FLEX and D32 emulators, the latest *DREaM* and *TRS-80* Level 3 emulators (without ROMs), PD Dragon software, a Freeware 6809 Amiga cross-assembler from Motorola, and lots of 6809, CoCo and Dragon documentation. The update files for *PC Task* and *PCX* can also be found in the emulation drawer.

PLACES TO GO

Emulators on Aminet
http://src.doc.ic.ac.uk/aminet /util/emu
Amiga emulator news
http://www.aic.net.au/~rodneyn/
TRS-80 emulators
ftp://ftp.amigalib.com/pub/be/misc/
TRS-80 programs
ftp://ftp.kjsl.com/tandy - (11pm to 6am GMT)
CoCo home page
http://public.logica.com/~burginp/emulators.html
Dragon home page
http://mudhole.ehcbe.ac.uk/~dragon

ROM VARIANTS

TRS-80 and Dragon emulators are not shipped with ROMs, for understandable reasons – much of the code is copyright by Microsoft, a company with a thriving legal department. You need the ROM files to run the emulators, and luckily it's not too hard to get hold of them, in one of three ways. ROMs appear on Emulator web pages and CD compilations, or can be transferred from a real Tandy or Dragon to your Amiga. This is straightforward if your old machine has a serial port or floppy disk drive, though it requires programming at the 6809 end.

Ready-converted ROM files are easier to use, but there are many variants and you need to know which you've got. Tandy's original CoCo had an 8K BASIC, soon augmented with sorely-needed graphics commands. Emulators expect the 16K extended version. Dragon ROMs are the same size but with routines logically arranged rather than split into two 8K chunks.

The Dragon uses the same keyboard ports as the CoCo, but wires them differently so key codes come out scrambled. A table on the CD (dragon.hardware.text) explains the difference. You can usually play games that expect a different mapping, but the key positions may be irritating (e.g. the 'down' key above the 'up' one) so joystick control is preferred. If you want to enter messages or programs you really need the right ROM for your emulator.

The new *DREaM* supports both Tandy and Dragon key mapping, and can run the Dragon 64 ROM. That's preferable for keyboard entry as it has auto-repeat and full key rollover, unlike earlier ROMs which ignored certain key-press sequences. However, the D64 serial port is not yet emulated.

The Z80-based TRS-80s were shipped with two versions of Microsoft BASIC – the trivial 4K 'Level 1 BASIC' and the much-improved 12K 'Level 2' version. A Level 1 ROM image should work with a TRS-80 emulator, as it expects the same hardware, but in practice it's not much use as there's little Level 1 software around and the language is a subset of the much improved Level 2. Error messages in Level 1 are neat, though: all possible problems are boiled down to one of three reports: WHAT?, HOW? and SORRY!

12K ROM images could come from either a TRS-80 Model 1 or Model 3; the Model 2 was a CP/M system without ROM BASIC. Clones like the Video Genie and PMC-80 used slightly-patched Model 1 ROMs. The differences are slight, and the Amiga TRS-80 emulator comes with software to patch old ROMs to the Model 3 standard.

The all-in-one Model 3 arrived when Tandy's original sprawling system flunked US FCC (Federal Communications Commission) interference tests – no surprise as it loudly broadcasts on most bands from Medium Wave upwards – I used a portable radio to check if mine had crashed during intensive number-crunching sessions!

Tandy added a hap'orth of tar, in the form of 128 bytes of video memory, to implement a lower case display – in a cent-saving measure, the original Model 1 had 1K of seven bit RAM for its all-capitals display. This confuses some old programs, but most work with 7- and 8-bit video RAM.

Buttons pause and re-start the emulator, or reset and rewind emulated 'tape' files. There's no adaptor for real cassettes, but lots of files on the Web. This Dragon 32 emulator is also compatible with most files made on a Tandy Colour Computer and Dragon 64. The 16K system ROM is not included, but there's a converter for ROM files from other emulators.

Keyboard emulation is precise, right down to the annoying way a real Dragon 32 ignores certain combinations of keys if pressed together. You get LST instead of LIST if you type quickly. Real analogue joysticks – standard for Dragons and CoCos – are not supported, although *DREaM* emulates them with cursor keys and the Amiga digital joystick. This is not always good enough. This restriction stems from the old GamePort system – this emulator will run on Workbench 1.3, unlike most others which require Workbench 2 or 3, but it still needs a 68020 or better.

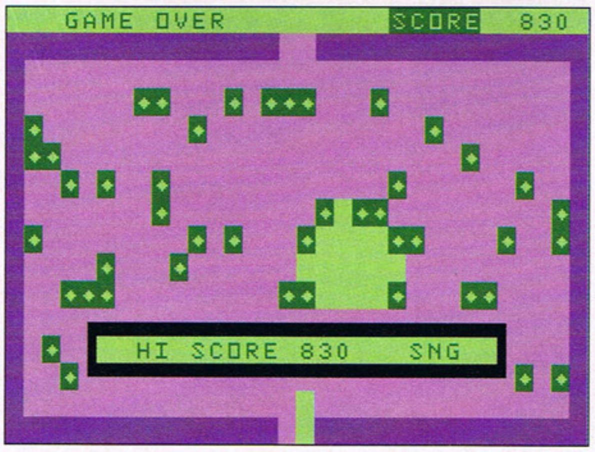
Printer output is re-directed to an Amiga file, and sound is optional. Dragons use a 6-bit digital to analogue converter timed by CPU loops, which sounds rough in emulation. You can save or load snapshots of memory contents in *DREaM*'s own DSN format, incompatible with .PAK and D32..D96 files generated by other emulators. Cassette files use the standard .CAS format.

SOFTWARE TESTS

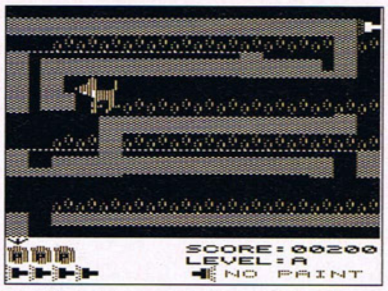
Android Attack loaded and ran fine. It's synchronised to the interrupt so it works at the right speed on fast machines. I had no trouble loading Microdeal's platformer, *Cuthbert Goes Digging*, but it was far too fast to play. *Crazy Painter* needed an EXEC command after the CLOADM, to get it started. It got the wrong mode in some colour settings.

Mined Out played perfectly on both 68040 and 68060, in terms of speed, graphics and sound. *Moon Cresta* was unbelievably, unplayably fast. The Dragon version is monochrome so this is little loss. Return of the Jet-I – a 3D dodger similar to Spectrum Deathchase – was exciting on the 68040 but too fast on the 68060.

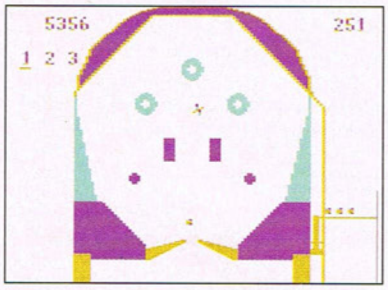
Rommel 3D – a *Battlezone* clone – makes good use of the 6809 and simple but effective vector graphics. I had to disable CPU caches to slow it down to my pace. The platform game *Bonka* and the *Galaxian* clone *Vultures* have speed controls, but still ran much too fast on an unshackled 68060. All the files I found in an appropriate format loaded and ran, but some misjudged the graphics mode, using shaded monochrome in place of chunky colour.



Ian Andrew's simple but addictive *Mined Out* ran on almost all of the early home micros.



Crazy Painter **shows a bug when** ***DREaM*** **confuses an obscure CoCo colour mode with a monochrome one.**



The colour and resolution limits of the CoCo make it an unconvincing pinball machine.

Example files include a smooth starfield, simple BASIC displays of the graphics modes and joystick positions, and speed testers. These work well. Overall this is a fine emulator, well-programmed and documented, but *DREaM* would be better still if it could read more snapshot formats and allowed speed limiting, which should also improve the sound. Both these enhancements are promised for the next release – I can't wait!

Just before this column was finished Sean contacted me to say that the new version will support Tandy CoCo and Dragon 64 emulation, serial as well as parallel ports, and adjustable speed from 50 per cent to 500 per cent of normal. It should also come with a converter for PAK files.

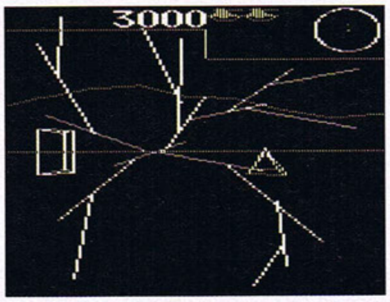
D32

D32 is another Dragon emulator project, but this one concentrates on the 6809 processor to the exclusion of the rest of the Dragon system. Author Stephen Goodwin (no relation) plans to extend it into a full Dragon emulator, but after three years he's got a long way to go.

You get two programs – *ASA*, a cross-assembler to generate 6809 code on an Amiga, and the dual-screen 6809 emulator itself. One screen includes the Control Panel, with buttons in place of conventional menus; besides Load, Save, Preferences and About there's a Memory editor, Disassembler, and windows showing registers, stacks and breakpoints.

D32 comes with simple example programs which write text in Dragon style on the second screen. You can re-assemble these with *ASA*, then test them

Continued overleaf ➡



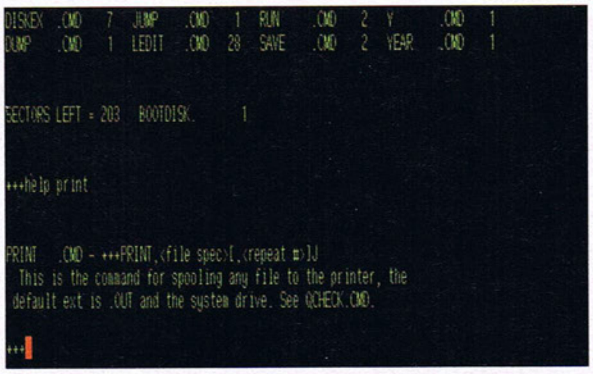
Hardware multiplication and simple graphics made the Dragon a good *Battlezone* (or *Rommel 3D*) simulator.

in the emulator. Documentation comprises short manuals for the assembler and emulator, and a 'Quick Start' text file.

BUGS

D32 is well presented, as far as it goes, but it has bugs and design weaknesses. It falls over, complaining of an 'illegal function call', when more than five windows are open. The windows cannot be re-sized so it's hard to arrange them tidily on the preset PAL screen. *D32* uses self-modifying code without flushing caches, so you must turn them off before running it on any 32-bit Amiga. It also uses the MOVE SR instruction, which processors after the 68000 have to emulate, and takes over the entire system unless you iconify it on the Workbench.

Stephen needs to learn more about programming the Amiga processors, screens and windows before *D32* can be wholeheartedly recommended. But if you're interested in learning 6809 assembler on an A500, *D32* is a good place to start, and may yet develop into a full-blown emulator to rival *DREaM*.



The very authentic, but very dull, scrolling green screen of the Amiga FLEX emulator.

PC EMULATION NEWS

Both *PC Task* and *PCX* have been improved, as predicted in our recent review. The changes bring the emulators closer together – *PCX* gains a 'VGA_Direct driver' for graphics cards, while *PC Task 4.2* adds maths coprocessor support. Both require an expanded Amiga with appropriate hardware for you to see any benefit. The updates are available free from the suppliers, Aminet and on the *AF* cover CD.

FLEX

FLEX was the serious operating system on early Motorola-based micros, the counterpart of CP/M on Intel and Zilog systems. Ben Williams' Amiga FLEX emulator is complete and stable, but rather slow on anything less than a 68040 system. It emulates a system with 2K ROM and 62K RAM, and up to four virtual disks from 85K to 16Mb in size.

The emulator comes with an assembler, disassembler, monitor and BASIC interpreter, plus a plethora of FLEX commands. It emulates a scrolling terminal, ACIA serial port and fast DMA disk controller, and redirects printer output to the Amiga. The documentation is good but the files have no icons – if you dislike typing commands, FLEX is not for you!

If you know FLEX and own a fast Amiga, this is a great emulator. The scrolling green screen is authentic but unlikely to attract new converts. FLEX is tough going for anyone brought up on mice and bitmapped graphics.

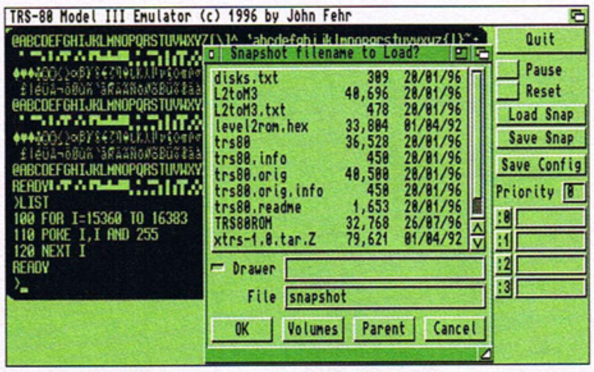


Tandy's silvery TRS-80 Model 1 (screen flicker and radio interference not shown)

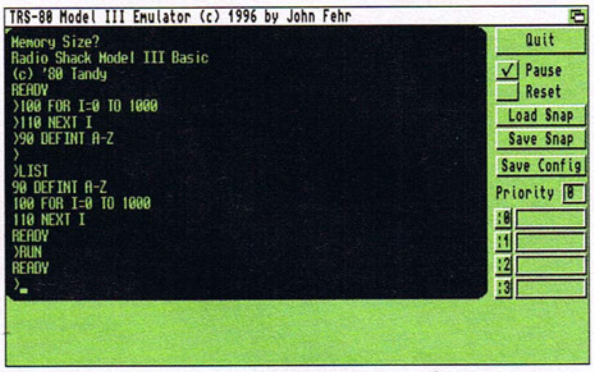
TRS-80

Contrary to past captions, I cut my programming teeth on an Apple 2 and in 1980 I bought my own Video Genie – a Hong Kong clone of Tandy's first TRS-80. Even in those days, big manufacturers attracted clones, and there were several unlicensed versions of Tandy's first micros.

The Amiga TRS-80 emulator is nominally for a Model 3, but this is essentially a cosmetic distinction – it will run almost all Model 1 programs. The original was written in compiled C and hence slow, so Canadian John Fehr re-wrote it in assembler, boosting it to full TRS-80 'speed' on most Amigas with 32-bit fast memory.



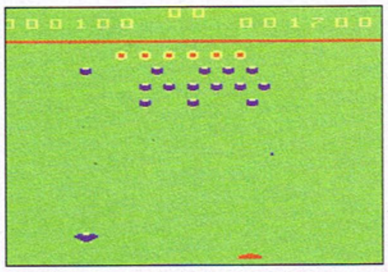
This Level 3 TRS-80 screen shows block graphics and the program that produced them.



Microsoft BASIC on the TRS-80 was the forerunner of Amiga & IBM BASIC interpreters.

TRS-80 displays show 16 lines of 64 characters, or 128 by 48 graphic blocks. The emulator pads this with a panel at the right hand side, allowing you to save and load 48K memory snapshots, assign up to four files for disk emulation, pause or quit.

If you liked the original TRS-80 you'll like this emulator. It's reliable, small, fast and easy to use, although short of documentation. There are lots of compatible files on the Internet, and it ran everything I threw at it.



Even by '80s standards CoCo graphics were garish in the *Galaxians* variant *Vultures*.

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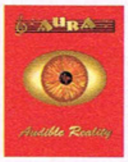
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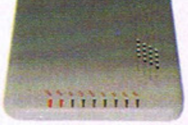
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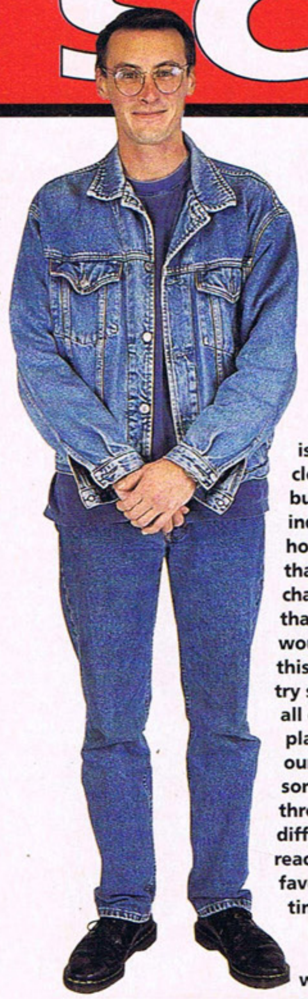
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SCREENPLAY



Andy Smith

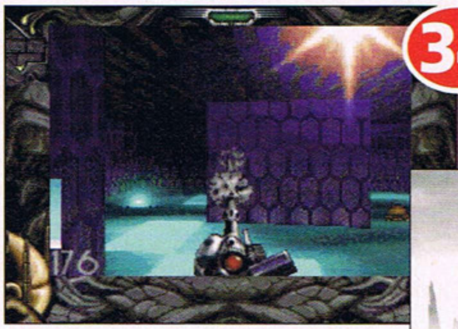
The Amiga has such a tradition of breeding innovative and creative software that it's somewhat surprising to find that a lot of the new commercial games we're seeing these days are unoriginal clones. That, in itself, isn't a bad thing if the clones are good enough but it does possibly indicate that software houses are more scared than ever to take a chance on something that's a bit different. I would have thought that this is the perfect time to try something new. We're all desperate to keep playing good games on our Amigas and if someone can come through with something different, I'm sure the reaction would be favourable. Now's the time to take a chance because we're all a captive audience. And we all have money to spend on something we want...

AMIGA FORMAT'S REVIEW POLICY

WHAT OUR REVIEW SCORES MEAN

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

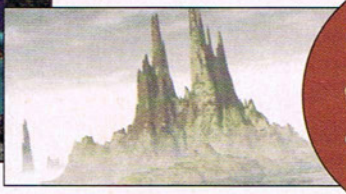
90+%	The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold – the most highly prized rating there is.
80-89%	These games are very good, but due to minor flaws are not the finest examples of their genre.
70-79%	Good games which are worth buying, especially if you have a special interest in a game type.
60-69%	Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.
50-59%	Below average games which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality games with major flaws and appalling gameplay.
Under 40%	The absolute pits.



Vulcan's *Genetic Species*. We show you the pictures of the game.

34 PREVIEWS

All the screenshots of the upcoming games that are fit to print. And there are loads of 'em too!



A shot from the creepy intro to *The Shadow Of The Third Moon*. Spook!



38 RE-RELEASES

More of those all-time classics come out for a second chance. Worth picking up this time round?





Break right! Break right! Oscar, Foxtrot One. Or something. Surely 'bombs away' at the very least!



40 PRO TOUR '97

A golf game from new developers Evolution Design. Worth a putt?



Golfing where you really do have to mind the trees.

42 READER GAMES

Tanx ....Laurence Still
A multi-player tank battle game.

Krusha ....Stuart Brown
A car-collecting, don't-be-crushed game.

Ultimate Domination..Paul Huckstepp
A mine the planet for minerals game.

Hamburger Heaven ..Robert Benjamin
A move-the-burgers-around game.

Cop Wars..............................P. Hutchison
A shoot-the-bad-guys-first game.

Aardvark ....Chris Pooley
A fly-the-paper-plane-and-shoot game.

Pole to pole.................................B. Cain
A move-the-bits-of-wood-around game.

Psychoblast ....Gareth Williams
A shoot-the-smiley-faces game.

47 GAMEBUSTERS

Including a superb playing guide to Vulcan's top *Tiny Troops*. Plus hints and tips to help you beat those games.





The Furfurians will prevail. They've read our top guide.

Previews

Andy Smith keeps you up to date with all the games due to be released in the near future. Honest. No, really.

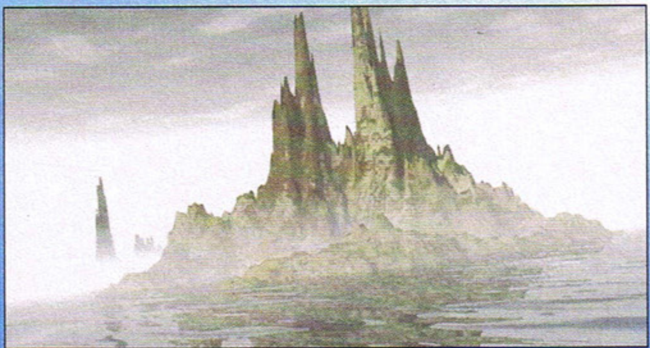
Shadow of the Third Moon



We've a lovely treat for you this month because we've managed to get a demo of this game on our cover CD so you can have a look at the thing yourself (whaddya mean you ain't got no CD? Go and get one).

Coming from Black Blade Software through Titan Computer of Germany, this CD-only game boasts some impressive specs. Essentially the game's an action/flight sim set in a futuristic land where you're out to save the day from a load of baddies.

"You'll notice the photorealistic, cloudy sky, not to mention the particle explosions."



Very nice. And also very foreboding. You can almost hear the Marie Celeste's bell…



It's looking good but we want to know what it's going to play like. Watch for the review soon.

The game's mission is of the type where the missions string together to form a campaign – you know the kind of thing. Pick your mission, read the briefing, nip down the armoury and choose what kind of weapons you want to be irresponsible with and then off you go flying over the landscape towards your target(s).

Talking of landscapes, the graphics are one of the first things you'll notice about *SOTTM* (as it shall now be known) because they've been real-time rendered using 3DTIS algorithms – which means nothing to me but I guess I should be impressed. You'll certainly notice the photorealistic cloudy sky, not to mention the particle explosions. And the elevation-mapped landscapes. Then there's the fog and the global haze effects, along with the semi-transparent smoke.

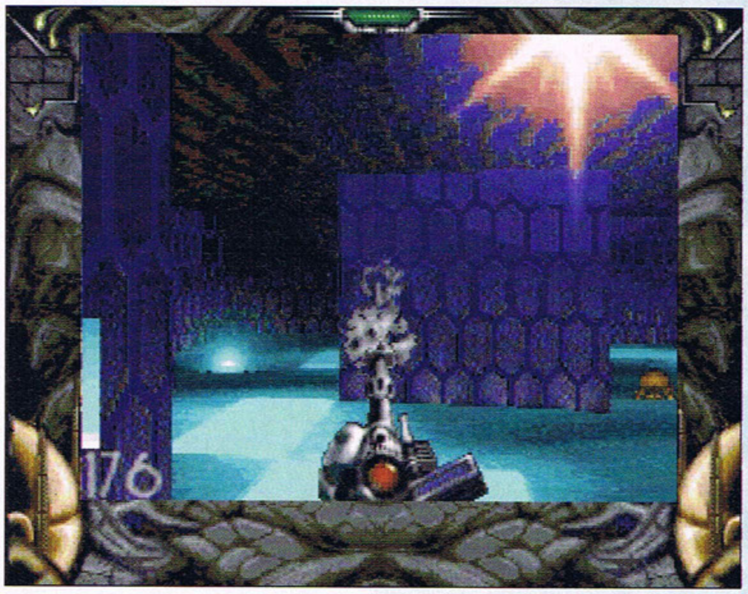
SOTTM aims for more than just good looks though; Black Blade have also put great emphasis on keeping the game running fast. This is combat action, after all, and you don't want teeny-tiny frame rates when you're dogfighting. And nor do you want thick enemies that just sit and wait to be killed. Black Belt have spent a long time getting the enemy's artificial intelligence just right. They've also concerned themselves with giving the game some lasting appeal and to that end they've constructed a great storyline. Have a peep at the screenshots. Load up the demo on the CD and wait for the full, definitive, *AF* review coming to an issue near you soon...

Titan Computers ■ 0049 421 481620
http://www.vossnet.de/titanhb/
Price and release date TBC



Get yourself set up and ready to go adventuring. That star thing is a Black Blade. Hmm.

The Genetic Species

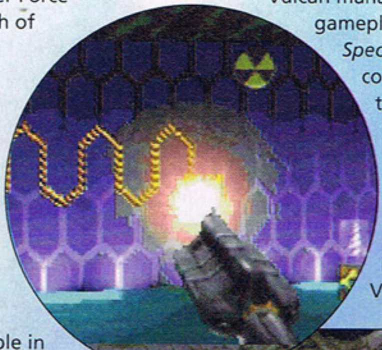


Now then, a few pot shots at this wall should teach it who's boss. C'mon then, c'mon...

"Most of the corporations that grew to rule the world used to dabble in genetic engineering."

These first-person action games just keep a-coming. We've had two crackers over the last couple of months – *Testament* (*AF99* 90%) and *Nemac IV* (*AF100* 93%) and Vulcan, it seems, are soon to bring us another one.

This CD-only game is set in the future when the world (and parts of the Solar System) are run by mega corporations. Now these mega corps don't get on too well and are often having a pop at each other and they don't much care whether a few million innocent people get in the way. There is hope however, in the form of the Counter Force Alliance. This bunch of worthy souls are dedicated to undermining the power of the mega corps but things just aren't that easy.



A while back, most of the corporations that grew to rule the world used to dabble in genetic engineering. Now that's not in itself a bad thing, but the nasty corps were a bit more unethical and unscrupulous than the public and (weakening) governments would tolerate and so were forced to do their experimenting on some planet other than Earth. This meant that everyone rushed to the moon to establish their research centres.

One such station, the Cantex Research Lab, set in the Magnus Crater on the moon has been seized by unknown troops. Battles have been raging for the last couple of days and it's known that at least three corporations have been involved, but even though the battles have stopped, it's not known who (if anyone) came out victorious.

What's more worrying though is that the Cantex Orbital Station – complete with a healthy nuclear stockpile – has been seized by an unknown force too. This is where you come in. As a fighter for the Counter Force Alliance you're going to be sent to the Cantex orbital station to infiltrate the base and find out exactly what's going on. Naturally, this means killing anything that gets in your way.

Plots are one thing, but how a game plays is what's important and if Vulcan manage to make the gameplay in *The Genetic Species* as good as the concept sounds, then we should all be in for a bit of a treat.

Vulcan ■ 01705 670269 ■ £29.99 RRP / £19.99 from Vulcan ■ Oct '97



Every first-person perspective action game has got to have a chainsaw weapon, and this is no different.





Top: yowch! That smarts! Bottom: that's taken care of the that baddie, he won't be back for more.



Nice explosions. That's cleared this room out, time to move onto the next.

Sixth Sense Investigations

3D Environment Construction Kit

Vulcan prove themselves to be versatile with the imminent release of a utility – albeit game-based. Here's how the thing works: Choose the size of your world, add corridors, steps, windows, floors, ceilings, doors, walls (at any angle, too,) slopes, crevasses and basically any geometric design of your choice. Then select yourself some surface textures from the default ones supplied or import your own IFF files. Chuck in a whole load of objects – desks, barrels, stools, crates, or whatever you want and then you can get down to the serious business of positioning the enemies – grunts, monsters, assassins or anything else from the default pool supplied. Or you can create your own.

All that's left to do is plonk down a whole load of pick-ups including keys, ammo, switches or whatever and then decide where the player starts. Save the whole thing out as a Vulcan.wad and then you can load the level back into the Vulcan 3D Player (that comes with the package) and play it. Or get one of your friends to play it. Or play one of theirs. I think you know what I mean. More news a bit nearer the time of release – December. Oh yeah. This is going to be released on floppy disk.

More of an update than a preview to a new game because we've already had a brief look at *Sixth Sense* back in *AF96*. We said then that we'd be reviewing it in *AF97* but it didn't happen, so we're going to have another look and give you the chance to play around with it too, because you'll find a demo of the game on this month's cover CD (if you haven't got a CD yet – upgrade).



Just like every schoolboy's bedroom. Complete with dodgy Queen poster and "keep out" sign.



"You play the part of a poor, deluded chap who thinks he's a detective. He's got a weird psychic sidekick friend..."



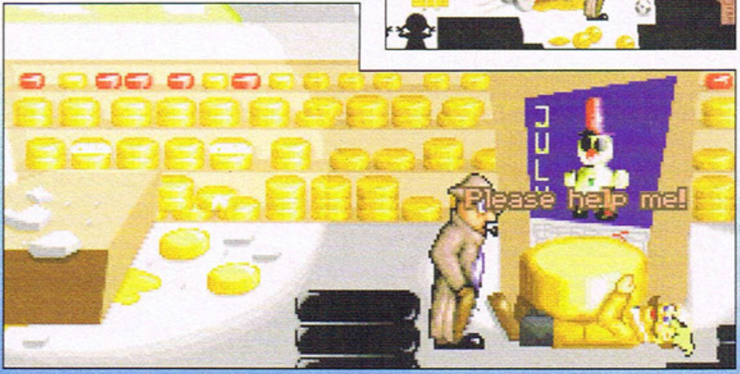
Our detective's office. Here he's actually on the phone to someone though you wouldn't guess it.

As you can tell, it's a cartoony graphic adventure. You play the part of a poor, deluded chap who thinks he's a detective. He's got a weird psychic sidekick friend who comes around with him, ostensibly to try and control the sarcastic spirit that makes a nuisance of himself throughout the game, but the pesky spook still manages to get in the way of most things. This doesn't sound like it's too serious does it? And it's not. The game is packed with humour – of the less subtle variety.

It's also packed with puzzles and things to do – but don't worry if you've played adventure games before and been annoyed at the ones that require you to spot the tiniest thing on the corner of the table farthest back in the screen. This one's all about using obscure objects on other obscure objects in order to achieve results; it may be completely illogical but once you know that, things strangely make more sense! The game boasts some 30 odd locations so there's going to be plenty of wandering around and collecting things to keep you busy. The full review will be appearing in a future issue of *AF*, have no fear of that. Stay tuned.

Epic Marketing ■ 0500 131486 ■ £29.99 ■ End of August





Here's a poser. How's our hero going to get this great cheese off of this bloke? It's not that easy...

Master Axe



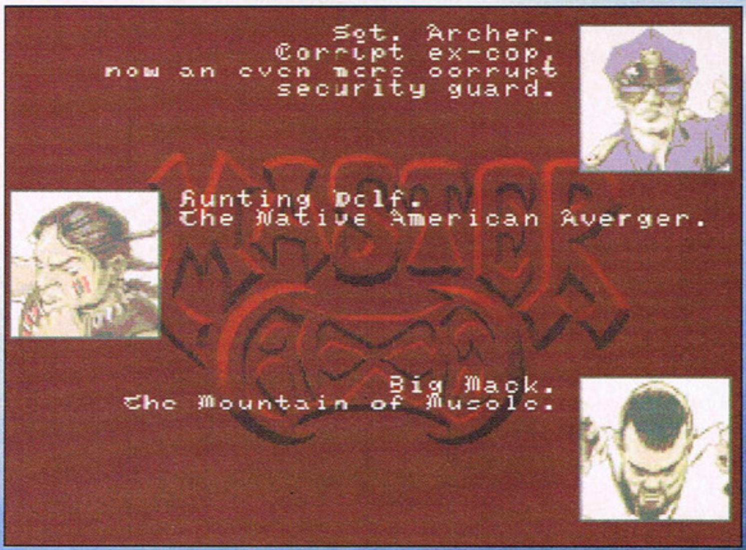
This game has been in development for quite a while but Epic have finally announced that they will, indeed, be publishing it 'very soon'.

It's a one or two player martial arts game, which means it's a beat-em-up to you and me, split into four parts and based around a central character, whose name is Neil Axe. But there's more. The game follows the exploits of the AGK Martial Arts Academy at international tournaments and, curiously for a beat-em-up, includes a 5,000 mile cycle race across America. There's even room in the plot to fit in a search by the ancient guardians of mankind (whoever they are) for the one who is worthy to become their champion – Myster X, The Immortal. Phew. Heavy shit, eh?



Of the four sections, the training academy is obvious, but it does give the player the chance to get used to fighting with equipment and also enables them to practice some combination moves which will come in very handy during the game proper.

Coast to Coast is a single player game based on this long cycle ride. The player controls one of the four game characters in locations ranging from the White House and Mount Rushmore to some steel works in Pittsburg, where they'll be fighting against such opponents as Sgt. 'Attitude' Archer – a bent copper who's now a bent security guard. As well as just winning the fights the player must concentrate on his energy levels. Neil Axe may have more moves than his opponents but he's also got to make sure he's got the endurance to finish the whole journey.



Just a few of the game's many characters. Sgt Archer's just asking for a smack in the mush isn't he?

"There's even room in the plot to fit in a search by the ancient guardians of mankind for their champion..."

Trial by Combat is a two player game with tournament scoring and structure. Based on real tournaments in Los Angeles, Las Vegas and Maui, the players can pit any two characters from the game against each other. Unlike real tournaments however this is a no-holds-barred event where anything goes. Watch out for those knives...



Spirit Struggle is another two-player game but one that concerns itself with the search for this Myster X chappie. Each player can choose to control either the light or dark side of a character and there then follows a fight on the spirit plane. Very Zen. AF

Epic Marketing ■ 0500 131486 ■ £14.99 ■ On sale now



A statue for you to win. Possibly. All will be revealed in the review. No,really.

Valhalla and the Charms of King Paul

Now then, details of Vulcan's fourth speech adventure are scant at the moment but I can at least tell you that the game is played from the point of view of King Paul and that there's the usual four large levels, some 1,000 word vocab and more than 50 interactive characters. More details and maybe the odd screenshot later in the year.

Re-releases

Guildhall Leisure continue to bring us those golden oldies via their Acid label, so Andy Smith checks out two of the latest, which both happen to be simulations...

Silent Service II



Sub sims eh? They're a laff. 'Course, if they were realistic you'd find yourself in a game where you sit around in a very small space for a few months, with a load of blokes and not much to do. Thankfully they're not like that in games and *Silent Service II* is one of the finest examples of how a sub simulation can be turned into a fabulous game.

Set in the Pacific in the latter half of the second World War you're an American captain trying to hinder the Japanese war effort by sinking as many of their ships as possible. The game gives you three ways to play: a single battle, a single war patrol or a war campaign. In the single battle you picks yer sub and off you goes for an engagement. In patrol mode you swim about the seas looking for your targets, engaging them and, hopefully, getting back to base. In the war campaign mode you join as a skipper sometime during the war (you can start on December 7th 1941 if you really want to) and then go on successive war patrols until either you're killed or the war ends.



It might just look like a boring chart to you, but to us submarine captains it's erm, not.

"How do you get close to a ship that's running at five knots faster than you without giving your position away?"

Nautical know-how

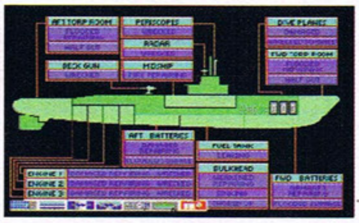
At first it's complicated and difficult to achieve good results. *Silent Service II* requires application so your first few goes should be spent in training, where you've merely got to sink a few tethered ships that don't move and don't fire back. This is a good way of getting used to the controls (there's an indispensable keyboard overlay supplied with the game).

But it's when you're into the game that the tension really starts to mount. There's huge scope for tactics (how on earth do you get close to a ship that's running at five knots faster than you, without surfacing and giving your position away?) and that's what makes it such fun to play. The player decides how and when and where to attack and then immediately has to worry about how, when and where he's going to run to, to escape a good depth-charging from the enemy destroyers that are bound to be homing in on him. It's gripping stuff all right, and I think James Leach's review of the game when it came out (*AF28*, 82%) was a little harsh.



Another significant amount of tonnage disappears.





Everything's ship shape for the moment (no surprise, we haven't engaged anything yet!)

Anyone who likes to be gripped by a game and is willing to put a good few hours into each session will get a lot out of *Silent Service II*. Once you know your way around the sub (which doesn't really take that long, honest) you'll be immersed (sorry) in the atmosphere and tension. If you talked yourself out of buying this, thinking if might be all work and no play then now's the time to wake up and smell the diesel. I didn't put this game in my top 100 Amiga games of all time, but on reflection it should have been in there somewhere.

PUBLISHER: Guildhall Leisure 01302 890000
PRICE: £14.99
VERSIONS: All Amigas
REQUIREMENTS: 1Mb, colour monitor and mouse
RELEASE DATE: Out now

GRAPHICS: ●●○○○
There are a lot of charts and maps to look at but they're all well presented.

SOUND: ●●○○○
Pings and 'busssshhhh' noises. Very nice but this isn't a game that relies on its sonics.

ADDICTION: ●●●●○
Get stuck into a mission and feel your hands go sweaty and your heart start pumping.

PLAYABILITY: ●●○○○
It takes a while to suss things out and you'll have to spend a while getting used to it.

OVERALL VERDICT:
A gripping and atmospheric game that can be immensely involving once you get going.

87%



Geoffrey failed to notice the square and hexagon were still tailing him.

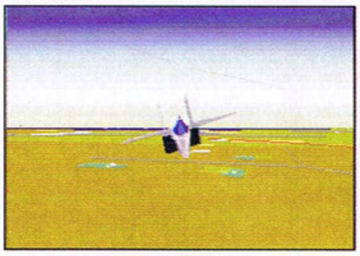


That's you, that is - having just flown through a wall of flame and smoke. Oh the glamour eh?

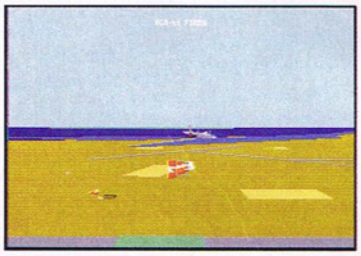
F15 Strike Eagle II

MicroProse had an unrivalled reputation for their flight sims during the mid-late eighties. One of their best was this little beauty, the follow-up to (go on, guess) *F15 Strike Eagle*. It was reviewed by Trenton Webb when it was first released (*AF24*, 90%) and, much as I respect Trenton's ability to judge a game, I can't agree with the high score that he gave it.

It's not so much a flight sim – more of a combat-action sim. The game offers you four difficulty modes and the harder the mode the more enemies you're going to be facing and the less damage you can take before buying the farm. There are also six theatres of operation, pitting you against a wide variety of targets and enemies.



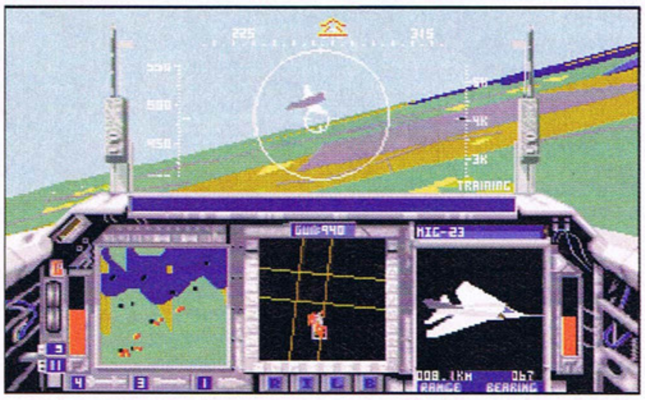
You. From the front. Yesterday. Out-of-cockpit flying is tricky. Tricky, but lots of fun.



A Maverick's eye view of a missile cruising its way to its target. Very aesthetic.

Shoot and scarper

Unlike most games of its type *F15 II* puts you in the cockpit with an objective, a bunch of missiles and some pre-programmed waypoints. The idea's just to get out there, hit your targets and get yourself home. There's none of this winding the engines up, checking the flaps, adjusting the HUD, checking and setting waypoints, clearing your travels through airspace with control towers and so forth. Simply look at the three TV monitors in front of you, select your weapons and keep your fingers poised over the chaff and flare buttons and hope you can down the incoming bandits before they get a lock on you.



Tally ho! That chap in your sights is about to get an AMRAAM up his exhaust jets in a second...

Hit your targets (primary and secondary for most missions) and high-tail it home before setting out on the next mission. And that's all well and good. Don't get me wrong, this is a great game – it's one of the fastest you'll ever get the chance to play, which makes the action that bit more exciting. It's been pared down to the action as much as is physically possible and that's where, for me, the game falls down. The missions all seem very similar with the only real variety coming when you switch theatres. Sure, the different skill levels mean there's plenty of challenge but the repetition is what kills the gameplay for me.

Top aerial action

However, on the plus side, it's very easy to pick up and play and even on the rookie level you're going to find yourself having to think fast and pull off some white-knuckle manoeuvres if you're going to get your bird home. Action fans are going to thoroughly enjoy it, as I did – I just wish there was more variety. Still, it's a fine, game and if constant aerial combat is right up your major air intake (or something) then you'll love it. AF



When your targeting hexagon goes red you have a very good missile lock. Fire 'em and forget 'em.

PUBLISHER: Guildhall Leisure 01302 890000
PRICE: £14.99
VERSIONS: All Amigas
REQUIREMENTS: 1Mb
RELEASE DATE: Out now

GRAPHICS: ●●●●○
Some of the fastest solid 3D you'll come across. A great looking game.

SOUND: ●●○○○
Not a great deal going on here apart from the odd interruption from the navigator behind.

ADDICTION: ●●●○○
It's easy to keep going and going but then the game's mission repetition begins to show.

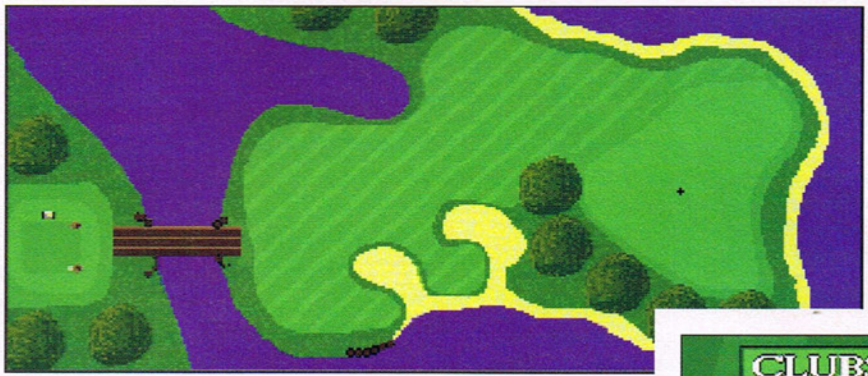
PLAYABILITY: ●●●●○
Just jump in and fly it mate. Very satisfyingly simple.

OVERALL VERDICT:
A super-fast, super-smooth flight sim that gives the player plenty to do.

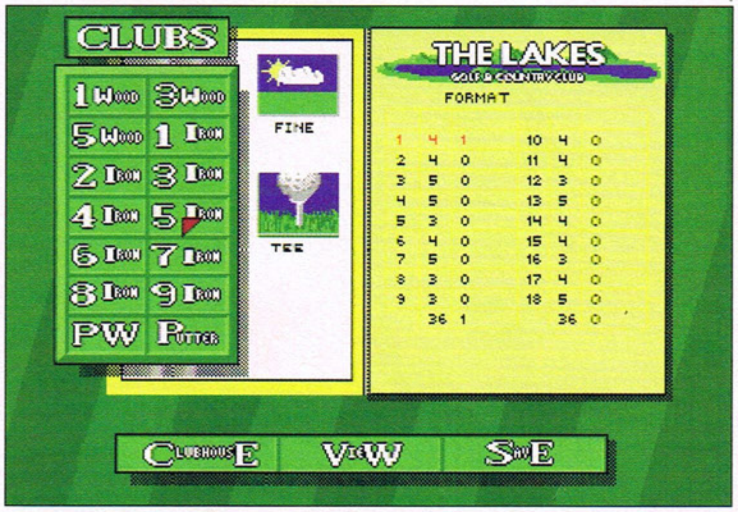
80%

Pro Tour '97

Andy Smith walks about and slaps small balls of plastic and rubber with big metal sticks. What larks eh?



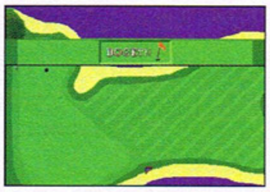
That tree just before the green means you're going to have to hit to the left of it (onto the fairway) and sort of make a dog-leg out of this hole.

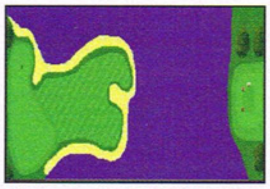


Choosing your club. In fine weather, from the tee on a par four, I'd go right for the one wood and blam the thing with all my might. A good player would probably do something entirely different.

But it's just how you slap those little balls of plastic and rubber that counts. It's in the challenge of being able to hit those little balls well, under the player's control, that makes a golf game fun. After all, make it dead easy and things are very boring (hey! just like real…) but make it too difficult and frustration outweighs the enjoyment.

What you need is a balance between giving the player the chance to either screw up or do well. That balance is usually found in the variables the player has to tinker with – things like which club to use, how much power to hit the ball with, which way the wind's blowing, whether to hook or slice (or in *Pro Tour* language, draw and fade) and what terrain the ball's landed in. *Pro Tour* gives you all that and more.





There are no trees to stop you going right for the flag from the tee on this course. Bet you find the bunker.

Plenty of Spin

As well as all of the above, *Pro Tour* gives the player the chance to put spin on the ball – so it either skips along the green or stops dead, depending on the amount – and to 'punch' the ball. This is a little chip shot that's ideal for getting you out of trouble or for playing chip and run shots onto the green (that's where you chip it and it runs onto the green – see?). One other major addition *Pro Tour* has that you won't find in other golf games is the ability to open and close the 'face' of the club. Essentially this means controlling whether you actually hit the ball 'face on' or not. Normally you'd want to hit the ball face on because then you've got a good strike at it and it goes just where you want. Open up the face and you kind of scoop the ball a bit so it flies higher but doesn't go as far. Closing the face has the opposite effect.

How you actually play is very standard. Point your little 'viewed from above' man in the right direction, select your club, add some spin if you want and then press the mouse to raise the power meter, press it again and it falls and give it a third and final press when it's on the mid-line between drawing the ball to the left and fading it to the right. If all goes well, and depending on the weather, the ball should go just about where you want it to.

I mention the weather because it has an effect on the flight of the

"Pro Tour gives the player the chance to put spin on the ball – so it either skips along the green or stops dead…"



There are some very droll plays on the players names. But we can't show you that screen…



That's about 90% strength with a few degrees of drawing to the left (an accident, I assure you). The white dot on the bridge is a rough direction guide.

ball. Fine weather means perfect playing conditions with full ball control. Dry weather means the ground is harder and thus faster so the ball will roll further but spin less. Overcast conditions mean the ground's soft and the ball will stop quickly. Rain presents the toughest challenge because the ground's wet and your visibility is reduced.

Watch the Weather

The condition of the ground is very important – in the same way as landing your ball in the rough or on the green is very important – because it affects the lie of the ball and therefore how much control you're going to have over the next shot.

And just what kind of golfing are you going to be up to? Well, you can play in an 18-, 36- or 72-hole tournament (set over the four courses supplied with the game). The more holes the bigger the purse, the object of the exercise being to win the tournaments and accrue some dosh. Erm, not that you can then spend it on anything, so it's a bit like winning points really. Oh and there's a practice mode too where you can get used to playing.

But is it any good? No. The one feature in this game that absolutely ruins it is the fact that you can't hit your ball over trees. You can whack off from the tee and watch as your ball rises gracefully into the air – dozens of feet into the air by the way it looks – and suddenly it's going to come crashing down when it passes over a tree (which all look like small bushes). Apparently this is a game 'feature' that "...allows for complex holes which require thought about where you are going to put the ball to give the best aim at the flag. It also requires you to use the draw and fade controls to shape your shots around trees...". All well and good in theory, but erm, why not just design holes that are complex and require thought about where you're going to put the ball anyway? After all, you don't actually want to hit the ball into the trees do you? Avoiding them is what the game's all about, but then being clever and being able to whack the ball over the top of them is a good way to short-cut to the hole. And if you haven't got the skill to hit over them you go round 'em. But to make the player *have* to go round them is such a cop-out.







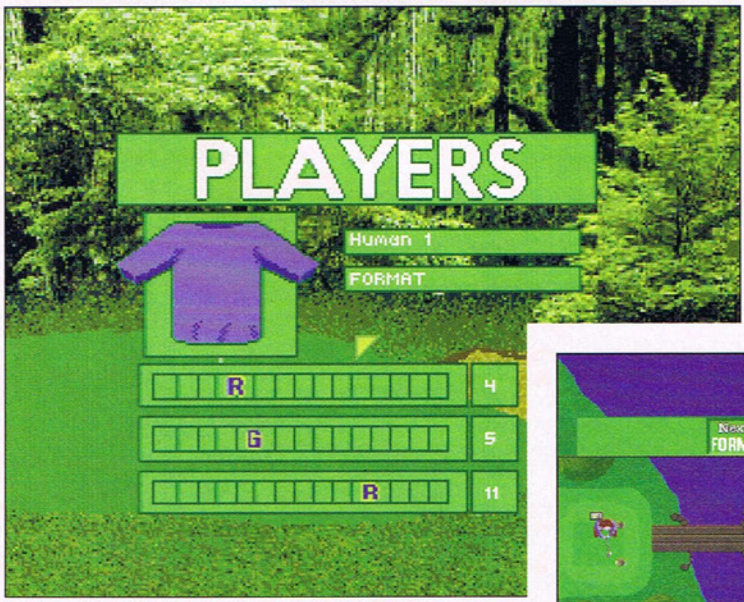


Working round that tree. Adding spin controls how much the ball rolls when it lands (well, that's the theory anyway – I didn't find it made too much difference either way really).

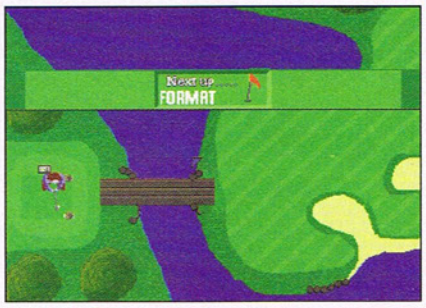
Not the best

Although it doesn't render the game unplayable, it takes a great deal away from it and the 'complex holes which require thought' boil down to about two seconds' worth of thought when you have a look at the overhead map and see where you have to hit the ball to avoid the trees. Ho hum.

Not the best golfing game around and certainly not as good as some of the old classics so, if golf's your thing, it's worth going for one of them, especially as Guildhall Leisure are re-releasing *Sensible Golf* very shortly (*AF74* 81%). AF



Not only can you name your player but you also get the chance to alter the Red, Green and Blue colour balance to create your shirt colour. Coo!



PUBLISHER: Evolution Designs (01938 9232657)
PRICE: £12.99
VERSIONS: A1200
REQUIREMENTS: 2Mb
RELEASE DATE: Out now

GRAPHICS: ●●○○○
Very bog-standard with nothing special happening at all.

SOUND: ●●○○○
Again, lots of run of the mill averageness.

ADDICTION: ●●○○○
Definitely more tedious than gripping.

PLAYABILITY: ●●●○○
Easy enough to pick up and play

OVERALL VERDICT:
A golf game with a feature that makes the whole playing experience flat and dull. A potentially good game spoiled.

35%

Reader Games

Billy Bragg once sang "Just because you're better than me, doesn't mean I'm lazy..." and that phrase can be applied to our readers' attempts to create their own games. Andy Smith casts his eye over them...

ON THIS MONTH'S CD

AFCD17:-ReaderStuff-/-ReaderGames-

And most of the games here have been created by people who are far from lazy. Most of the games have had hours of loving hard work poured into them, in an effort to create a game that's fun to play. I say most, because some have obviously been knocked up in an afternoon. But now, in a new twist to the Reader Games section, you'll be able to judge for yourself (if you have a CD that is, and if you haven't, then this is another excuse for you to upgrade) because we're now putting all of the Reader Games featured here on the CD.

In future if you submit a Reader Game you must state quite clearly that you don't want the game to feature on the CD or we'll assume that you do. You're also going to have to cut out and sign the small form at the end of these pages and include it with your submission.

And once you've had a look at them all you can vote on which you thought was the best. So now if you submit a Reader Game, you not only get your game seen by thousands but they're going to vote on how good they thought it was. If the £50 prize isn't encouragement enough then surely that is? So without further ado, this month's games...

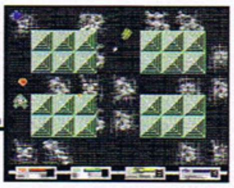
GAME: TANX AUTHOR: Laurence Still LANGUAGE: Blitz Basic



Grab all the power-ups and charge around the place trying to kill all the other guys...



If yellow picks up the power-up it's curtains for blue...





Starting us off this month is a multi-player only tank battle game. You and up to four mates (via a four-player adaptor) trundle around a small arena blasting each other to smithereens.

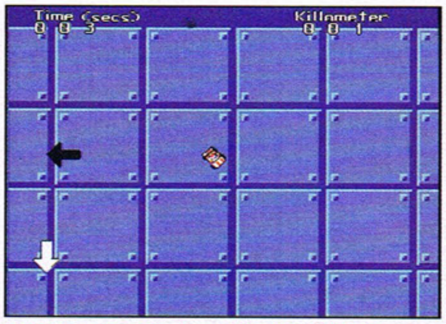
We've seen many of these games and the only thing that marks this one as different is the sheer amount of power-ups that are available. Every time one is collected, another appears at random in the arena. Most of the power-ups are fairly innocuous in that all they do is improve your turning rate or increase your speed but there is one power-up that affects the whole way the game's played – the 'kill all the others' power-up. As soon as one of these appears the players make a mad dash for it (a good time to start shooting at them!) and things become lots of fun.

It's not outstandingly good looking but at least it's clear. The sound is reasonable and I think the only thing I'd change are the tanks, which feel a bit light. AF

VERDICT:

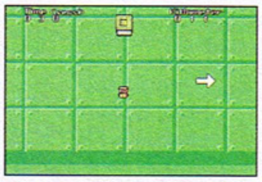
A mad-dash blast of a game if you can get a couple of people to join in with you but useless on your own. Not outstanding but it has some short-term enjoyment.

GAME: KRUSHA AUTHOR: Stuart Brown LANGUAGE: Unknown



The white arrow shows where the next pickup is and the black arrow shows where the crushing truck is coming from.

Here's a novelty game. You control a small car which you have to 'drive' around a small arena collecting smaller cars (you're crushing them apparently). Avoid being crushed by a large truck-thing that slowly (to start with) pursues you and keep an eye on the arrows. A small white arrow points to the car you should be heading for while a small black arrow points towards that slow-moving truck. As you progress you earn points and the pursuing truck gets faster and faster and once it hits you it's game over.



Onto the next stage now and the crushing truck has sped up. Gulp.

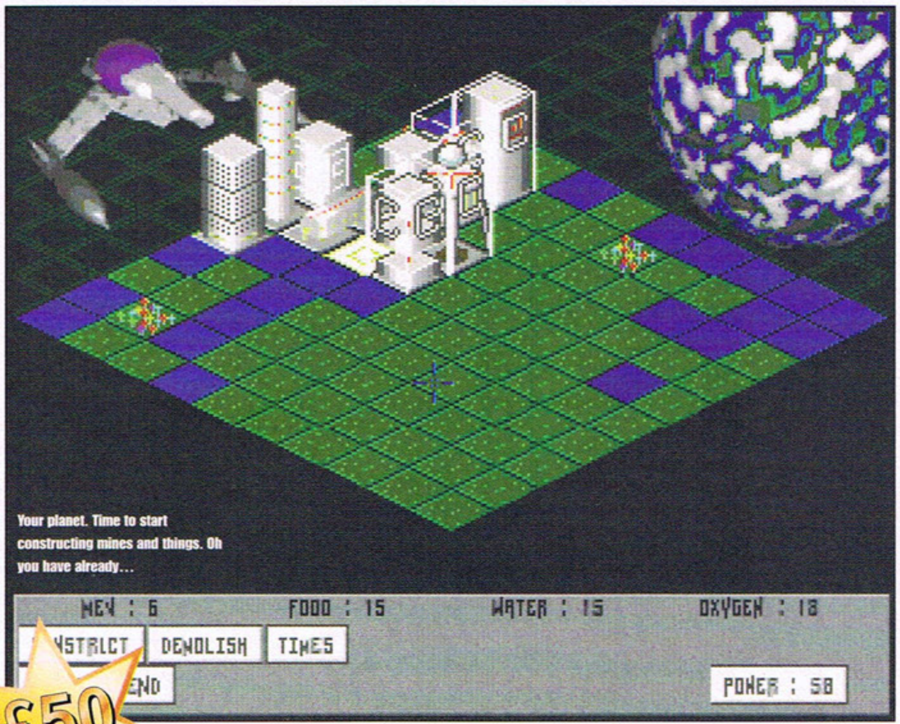
The game is surprisingly tense but controlling your car is a bit of a nightmare. It often doesn't go in the direction you think it should and it takes a while to work out just how to get the thing going in the direction you want. When you have sussed the controls you'll also lament the fact that the car often just jumps from one position to another.

Despite this, the pursuing truck follows at a good pace letting you feel you can avoid the thing until you find yourself horribly trapped and you know the end is inevitable. AF

VERDICT:

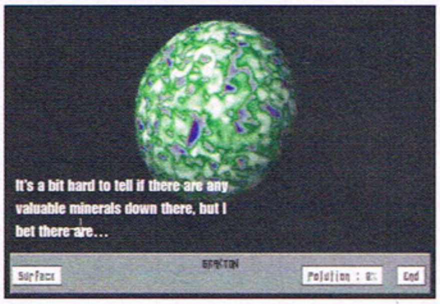
A well-paced and enjoyably tense game that is let down by the non-intuitive controls used on the player's car. A bit more time and effort to smooth off the rough edges would have paid large dividends.

GAME: Ultimate Domination AUTHOR: Paul Huckstepp LANGUAGE: Amos Pro



Your planet. Time to start constructing mines and things. Oh you have already…





It's a bit hard to tell if there are any valuable minerals down there, but I bet there are…



This month's worthy winner of our £50 prize is this space exploration/ resource management game Ultimate Domination – a game not unlike the old K240.

Essentially it's a one to four player wargame (the Shareware version on the CD only supports one or two players) whereby you have to develop, maintain and expand beyond a starting planet in an attempt to dominate as much of the Cosmos as possible.

The game's turn based and there's a limited amount each player can do at the start of the game but as things progress so does the workload. Research weapons, keep an eye on your pollution, make sure you're mining enough resources and generally get stuck into an excellent looking, well polished and very involving exploration/combat/ management game. Great stuff but it's not very forgiving. Get things wrong in the early stages and you'll have messed up the whole game and will have to start over again, so make sure you've read all the instructions before setting out!

We won't be including Shareware games in these pages in the future and this game's only appearing so we can put it on our cover CD and give you all an idea of the standard of games sent to us each month.

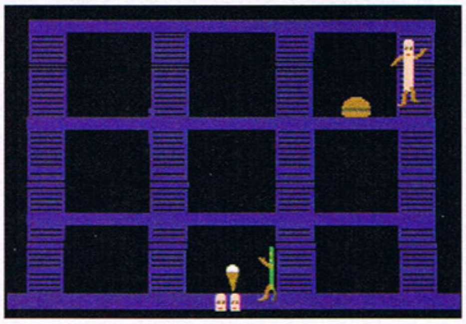
Now that we're putting all the games onto our CD we only want the full, original version not forgetting the disclaimer form on page 45 and a recent photo.

VERDICT:

An excellent (if derivative) game that's involving and entertaining. You'll enjoy the taster but don't expect to see any more Shareware appearing in these pages.

GAME: Hamburger Heaven AUTHOR: Robert Benjamin LANGUAGE: American…



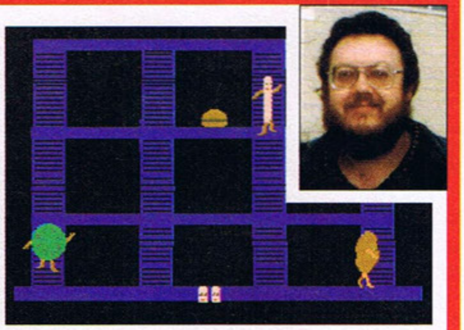


No, this really is what the game looks like – we haven't doctored the screenshots at all. That green thing is a slice of gherkin. Or something.

Blimey. Not a month goes by without something arriving from the prolific American Robert Benjamin. Normally I'm thrilled to bits when his packages arrive because I know that although the game's probably going to look dreadful it's going to be, curiously, fun to play.

Maybe that's why I'm so disappointed with Hamburger Heaven. Maybe my expectations have been raised too high thanks to such classics as Fred the Frog, Battle of the Stink Beetles and Treasure Hunt. Hamburger Heaven just isn't in the same league.

You are Henry the Hot Dog. The screen comprises four platforms. A hamburger arrives on the top platform and every time Henry walks over it, it drops down a platform. When Henry walks over it when it's on the bottom platform the hamburger disappears. When two hamburgers have been seen off in this fashion, you're onto the next level.



And that brown thing bottom right is supposed to be a potato. Yikes.

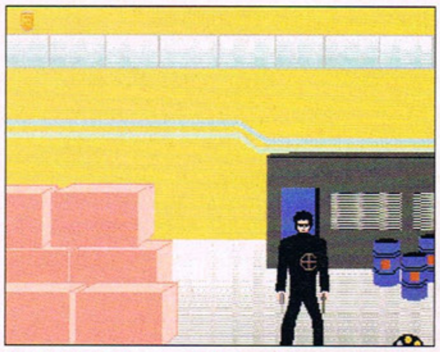
As you move up the levels there's an increase in the number of baddies and you have to avoid any other characters because contact with them causes death.

And that's all there is to Hamburger Heaven. I'm used to the less than stunning graphics but I'm not used to Robert's games being so, well, un-thrilling. It's not difficult to complete the game's six levels on your first attempt and, frankly, you're going to have little fun. Keep 'em coming though Robert, we know you can do better than this…

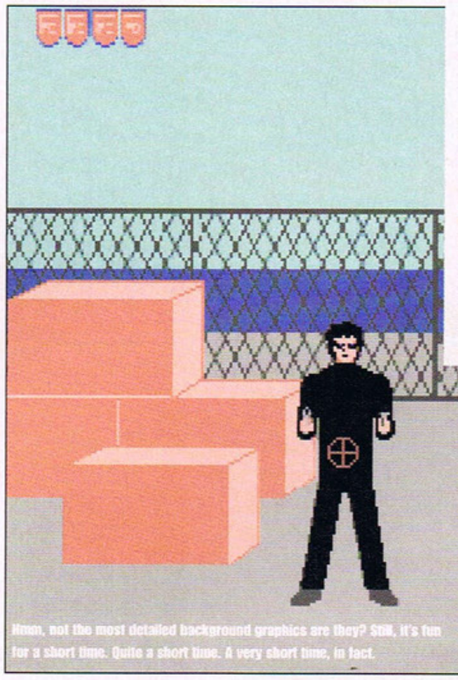
VERDICT:

Looks awful, plays bad and has little enjoyment value. Not the standard we've come to expect of Robert. Here's hoping next month's offering is an improvement.

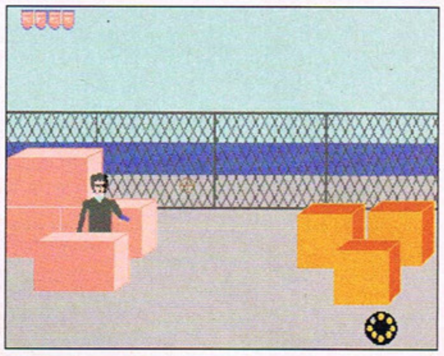
GAME: Cop Wars AUTHOR: P. Hutchison LANGUAGE: Blitz Basic



That's that baddie taken care of (he's dropped his arms so he must be dead) but it's time to re-load before the next one appears.



Hmm, not the most detailed background graphics are they? Still, it's fun for a short time. Quite a short time. A very short time, in fact.



Virtua Cop this most certainly is not, but it's based on the same idea. You control a small cross-hair that you move around the screen with the mouse. Every time a baddie pops up (you know it's a baddie because no goodies ever pop up) you let him have a slug between the eyes. Or the knees. Or the elbows. Or wherever actually, just as long as you let him have it before he starts shooting back.

Kill the set number of baddies per level (the number depending on what difficulty level you've selected) and move onto the next of the game's five or so levels. There's not much difference between the levels except for the places the baddies appear and sometimes they're a little bit smaller because they're slightly further away.

Running out of ammunition is the only other worry and that's easily remedied by simply shooting the cylinder in the bottom right of the screen which then fills up with bullets. Easy.

This is actually quite fun. There are a few little niggles. The graphics are very simple and the baddies tend to flicker horribly when they suddenly materialise (and there only appears to be two baddie poses). The sound's nothing special but at least the gameplay's in there. It's too easy if anything because even in expert mode you'll find it straightforward to deal with the number of baddies appearing at any one time. A lot more work on the graphics, a few more baddies, some more movement and a few extra sound effects would all improve this game.

VERDICT:

Looks and plays very simply but it's entertaining for a short while. Despite the 'hold the left mouse button and no baddies appear' bug.

GAME: Aardvark AUTHOR: Chris Pooley LANGUAGE: Blitz Basic 2

This is more a demonstration of a valiant effort than a really playable and enjoyable game. Essentially it's a game of a couple of paper darts in a dogfight over a very bizarre landscape.

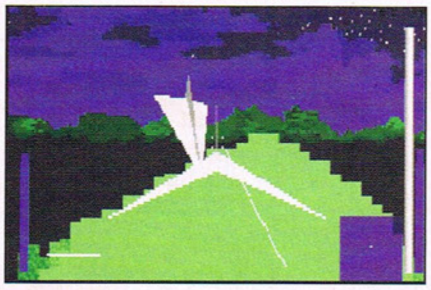
Both darts are armed with three types of weapon – tracking missiles (fire 'em and guide 'em in), missiles (of which there are only eight per bout) and bullets. Chase each other around the skies using a combination of joystick/keyboard or mouse/keyboard and attempt to cause enough damage to the enemy's shields to make 'em explode. Simple really. Oh yes, too much contact with the ground has an adverse effect on your shields so bear that in mind.

In one player mode the computer provides a tough opponent while in two player mode the game's more fun but soon becomes quite, erm, boring really. It's certainly fast, it's mostly smooth and initially it's fun. That fun soon evaporates however and you're left with a basic dogfighting game.

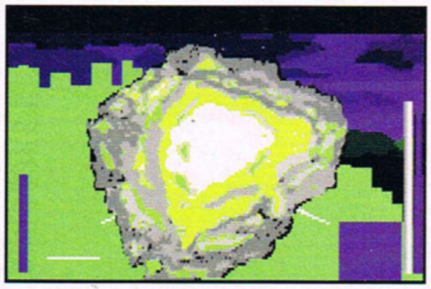
Chris has demonstrated that he has the ability to create better things however, because this is obviously well coded. It's just a shame it's not actually much fun to play (more fun than Hamburger Heaven however,– see elsewhere in Reader Games). A commendable attempt that just doesn't have enough wallop in the gameplay department.



See? You're a kind of paper dart-thing flying over a very odd landscape. And you've got your guns blazing at the computer opponent here.



The computer opponent again. And that very peculiar landscape. The white bar (right) shows height while the blue one shows velocity.

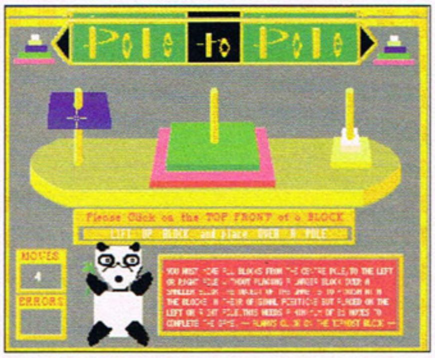


The computer opponent's tough enough but when you've got great big green 'hills' appearing from nowhere, things are very tough.

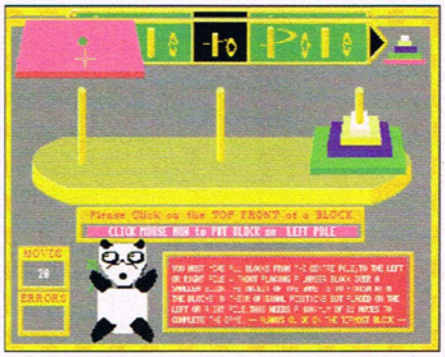
VERDICT:

Well programmed and initially fun to play. The fun wears thin far too quickly though and you're left with a game that's rather dull and boring to play. Keep at it though Chris, you've obviously got the talent.

GAME: Pole to Pole AUTHOR: B. Cain LANGUAGE: Amos



Now then, drop the blue thing and pick up the white and yellow...



Hurrah. That's the pink base shifted. Now put all the other bits back.



And here's one I made earlier (not in the least possible moves though).

Neat little puzzles are always a winner with Reader Games and this is no exception. The game's actually the old Tower of Babel game whereby you have to move a set of blocks from a middle peg to either the left or right peg (there are three in total) without putting a larger block on top of a smaller one. Simply pick up a block from the middle peg, put it on another peg and pick up another block from the middle and put that on the last free peg. Then move the first block onto the second block to free up a peg and pick up another from the middle.

It's not as simple as you might think to start with but it has its own built-in obsolescence in that once you've worked out the route to move the blocks to an outer peg in the minimum number of moves (which is 31) you don't tend to forget it, so the game's all finished.

What's nice about B Cain's effort is the way the blocks can be picked up and moved smoothly. It's not, maybe, as easy to select the block initially as it could be but once you've got it moving around it's very nice. The game's teeny white text on a red background doesn't really work either.

And as for that panda – well, I wouldn't bother myself. it's a nice effort and fun to play until you learn how to do it.

VERDICT:

Moves nicely and looks fine (bad drawings apart) but it has a limited lifespan because you can achieve the maximum efficiency relatively quickly.

GAME: Psychoblast AUTHOR: Gareth Williams LANGUAGE: Blitz Basic 2

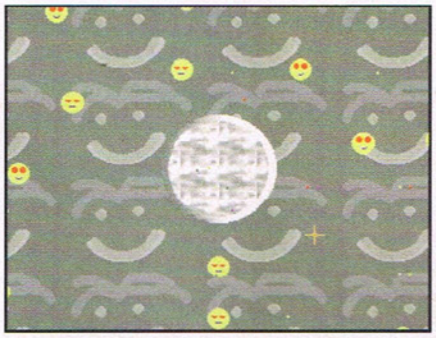
Gareth's last appearance in Reader Games was with a wacky little number called Gloss Finish (AF91, "...more an example of the programmer's ability to finish a project than a rivetting good game"). Though the game was not bad, it suffered from a lack of variety and became dull quickly. The same can be said for Psychoblast though it's a very different game.

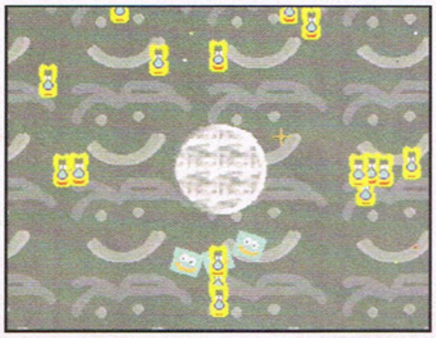
You're controlling a cross-hair that you move around the screen with the mouse, the idea to shoot all of the odd sprites that come flooding from the edges of the screen towards your home planet-thing in the centre. Once the set number of sprites have been destroyed you're onto the next level. Keep on going in a similar fashion until your home planet is hit too many times (3 or 4) and the game's over. You've got a couple of chances here because if your planet gets hit it shrinks a bit – which actually helps by giving you more time to clear the sprites – and if you survive a couple more levels without taking a hit, it grows back again.

Sure, it's fun and the speed and smoothness illustrate good programming, but it's not new and it's not that enthralling. A couple of goes and your enthusiasm will have exhausted itself. One thing to look out for though are the wacky sound effects – they're not in themselves outstanding – but they are a giggle when you hear them all together.



Remember folks, title screens are important. Like this one. Ahem.


Eeek! Here come the deadly smiley things. Shoot 'em now!


Lawks! Things are getting very hectic now. Watch them at the bottom!

VERDICT:

Well polished and put together but the fun doesn't last long and there's little to encourage you to come back for more. A good ten minute blast.

MORE OF THE SAME PLEASE!

When you're sending in your submissions make sure you also give us:
1. an address where you can be contacted
2. details of the language used to create the game
3. a recent photo of yourself.

The address to send your stuff into is:
Reader Games • Amiga Format
30 Monmouth St. • Bath • BA1 2BW

VOTE FOR YOUR FAVOURITE READER GAME

When you've had a look at the games on the CD, decide which are your favourites. At Christmas we'll be awarding some big prizes to the winner!

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Choice 2: ....

Choice 3: ....

Name: ....

Address: ....

....

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READER WARRANT

Everything included on the AFCD must have a reader warrant with it. Just cut it out off this off this page, sign it and send it in to us with your game and a recent photograph of yourself. A last reminder: if you don't include this warrant we simply won't bè able to put your game on the CD – and that means you won't be able to have it judged by other readers.

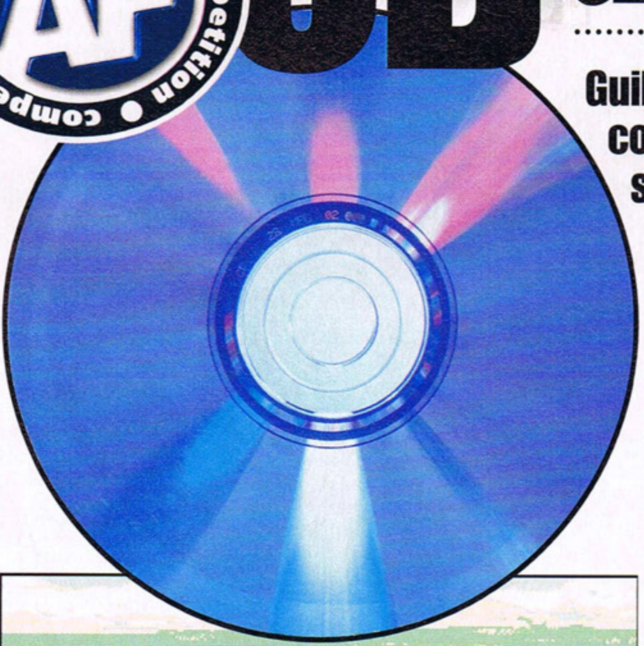
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Civilization CD up for grabs

competition • competition • competition



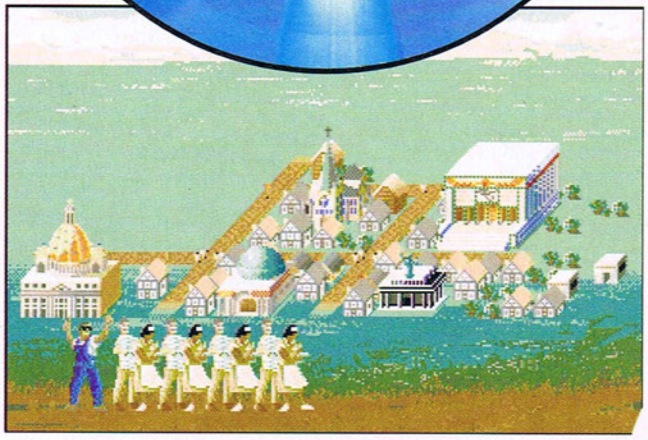
Guildhall Leisure have kindly donated ten copies of the new Civilization CD for a special Amiga Format competition.

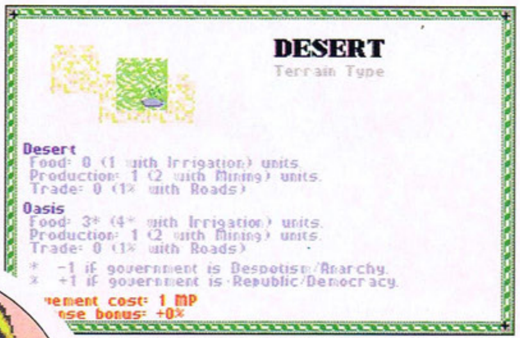
That's right. *Civilization* is to be re-released in a special CD format, and you could be one of ten lucky people to win a copy for very little effort on your part. Simply answer this question:

Who originally created the computer game Civilization?

Send your entries on a postcard to: CivCD, Amiga Format, 30 Monmouth Street, Bath BA1 2BW. Remember to print your answer clearly, and your own name and address on the card (you'd be surprised how many people forget). Multiple entries are strictly naughty, and not allowed.

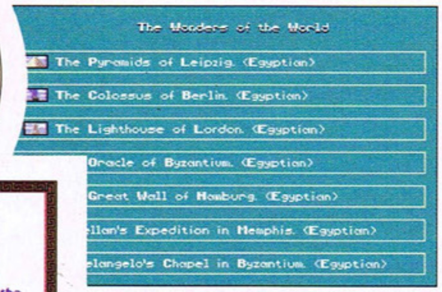
Rules: 1. No employee of Future Publishing or Guildhall Leisure are eligible for entry.
2. No cash alternative is available.
3. The closing date for all entries is 30th September '97.
4. Winners will be notified in issue 104 of *Amiga Format*, and by post.

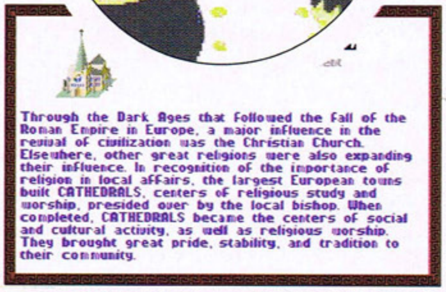


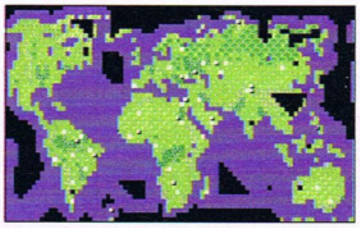












Build the wonders of the world, find a cure for cancer, develop Nuclear Fusion and unite the globe under a single banner – all before tea time. Civilization is an absorbing game which well deserved it's place in the AF top ten of all time – and the new CD version will be better still!

GameBusters

Just when you thought things were getting too tough. Just when you thought you might as well give up, along comes Amiga Format and GameBusters – Andy Smith dispenses the hints, the cheats and the tips to get you through those oh-so-tough games.

Part 1 Tiny Troops

Vulcan's fabby little *Command and Conquer*alike can be tough in places, so here's the first of a two part guide to the game from Vulcan themselves – and if anyone should know how to play the game it's them. Oh yes, *Tiny Troops* (*AF95* 88%) is still available from Vulcan (01705 670269) for just £17.99. Here we are then...

BASIC WARFARE

1 Learn to co-ordinate your troop's attack patterns early.
By concentrating all of your firepower on one of the enemy troops at a time, you will kill his troops off faster, reducing his attack strength as his numbers are depleted. By reducing his numbers quickly, rather than having lots of one-on-one battles going on, his troops will get far less shots in – safety in numbers is the key.



2 All your troops should engage the enemy at the same time.
Delivering one huge wave of destruction to knock out the enemy's individual troops quickly, allows them to get as few shots off at your troops as possible. Separate the individual troop types into groups, and then send your slower troops on ahead of the faster units and use your timing to make sure that the backup arrives on time.

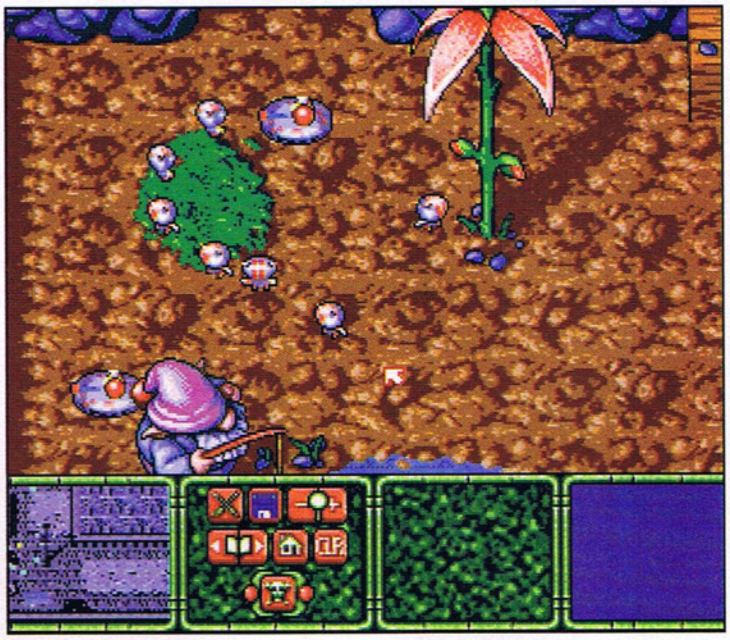
3 Try to waste the enemy's grenades for him.
Move a single trooper or a small unit to within range of enemy grenadiers and use hit-and-run tactics against them. Let your troops take a pot shot or two at them, wait until they throw their grenades and then quickly evacuate the area. Start the cycle again until they have depleted their ammunition.

With practice you can run circles around enemy grenadiers, moving your troops a short distance every time a grenade is thrown, to a position where your troops can carry on firing at the enemy almost uninterrupted.

If there is a big battle going on, the easiest way to achieve this, is to use your Armageddon and retreat buttons to move your troops backwards and forwards.

4 Keep an eye on your troops during and after battles.
Click on them individually to check their energy bars and when they become too weak, send them back to base for repairs. Then try to get them to rejoin the others as quickly as possible, or leave them to guard the base if things are too hot on the front line. Better to have fighting fit troops than dead ones.

5 When the enemy has superior firepower, it can be better for you to take the battle nearer to your base by clicking on the retreat icon.
When this happens, some of the enemy's firepower will be absorbed by your base, which is capable of taking a lot of damage, and this also allows you to send badly damaged troops in for repairs and get them back into the action quickly.



Your gang of Furfurians move around in an enemy tank. You're going to have to sacrifice some troops, but hey! That's war.



Choosing your squad for the battle ahead. Pay attention to what the general says.

6 When your troops are firing at a target, use the forced fire option to speed up their firing rate.
First click on an individual troop or drag a box around a large group of them. Then click on the attack icon (the clenched fist) and, finally, click on the target.

Every time you do this your troops will fire another shot in

continued overleaf ➡

Helping Hands

ROBOCOD



Please could you give me a cheat for James Pond 2, Robocod? Me and my friend can't even get halfway through.

Roger May
Rotherham

Certainly Roger, by pressing the CTRL and Return keys, this will turn the cheat mode on, making you invincible. You'll know if the cheat's working because the border should flash.

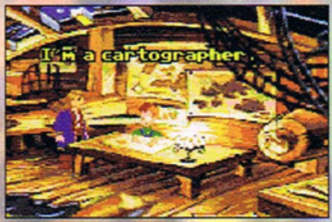


MONKEY ISLAND 2

I'm stuck on Monkey Island 2 where I'm in a drinking contest that I can't seem to get out of. Please help.

M Moore
Plymouth

How many more times? Monkey Island 2! Aaaarrgggghhh! OK. When Mr Rum gives you the mug, use it on the tree to empty it and then refill it with the near grog that you've got with you (haven't you?). Then you can drink that and still have a clear head. Hoorah!





addition to their usual attacks, so the faster you can do this, the faster your troops will fire.

7 Mines can be cleared by sending a fast unit, such as a foot soldier, towards it.
Use the two-point click movement option (right mouse button) and send him towards the mine, and immediately back the way he came, in a v shaped movement, just before he comes into contact with the mine. This will ensure that he escapes with minimal damage.

8 Don't forget that pillboxes near enemy bases can be used to wipe out the bases with devastating firepower.

9 Flame-throwers can hurl fire through walls and obstacles.

10 The converge icon is good at getting troops out of trouble.
Or indeed stopping them from chasing enemy troops into dangerous places.

11 Remember, only normal footsoldiers can be used to take over pillboxes.

12 Use the repair icon.
It's a quick way to send individual troops back to base without sounding a full-scale retreat.

13 Pillboxes will usually miss a fast-moving target.
Although they may hit other units that are following nearby.

14 Use the multi-click movement option (right mouse button).
This enables you to make a troop run around a pillbox to find out which directions it can fire in, and so figure out which direction you should attack from.

GENERAL BATTLE LEVELS

Level 1

BATTLES 1, 2 & 3
These are good levels for learning some of the basic principles of warfare and don't really need advice as they are very straightforward.

BATTLE 4
The tip here is to send most of your troops across the bridges quickly,



The rather awkward and clumsy mass movement icon. Takes a while to suss how it works.

leaving at least four of them behind to guard the base. Do not engage enemy troops on the way across, otherwise you will find all the bridges have been blown and you won't be able to complete the level.

BATTLE 5
Ignore the General's advice, he's an idiot! Or an enemy agent! Keep your troops behind to eliminate the hit squads that the enemy sends across to attack your base, before sending your boys over there. LISTEN TO THE

> **"Ignore the General's advice, he's an idiot! Or an enemy agent!... LISTEN TO THE GENERAL AND YOU WILL DIE!"**

GENERAL AND YOU WILL DIE!! But it is a good idea to protect your transports, by sending them straight across to the other side – not too close to the enemy base though.



BATTLES 6-12
These are also very straightforward levels that don't really need advice.

BATTLE 13
Don't bother with the transporter, it's not worth the effort, just select a standard foot soldier instead, the extra firepower will help you end this level quicker.

Level 2

BATTLE 15
Easy enough this one, the "thermals" are created by attacking one of the trees to the right of the player's base, then getting your glider to fly over it and across to the other side of the lake. Next you must shoot the switch that controls the train to switch it off, though this must be done when the train is near the control box, then your troops will be able to travel along the tracks towards the enemy's side. The next step should be to take over the first pillbox and lure the enemy towards it by sending one of your troops into the enemy's base, then immediately back to the pillbox.

BATTLE 16
Another easy one, just look after your base and let them come to you.

BATTLE 17
For the first few minutes of this level it's best to barricade the bridge near your base with your tank and a few grenadiers until the enemy's second attack wave has been eliminated. Next, send your transporter with two grenadiers on board down to the bottom of the map, to the south of the pillbox (the enemy pillboxes on this level are programmed to only fire upwards) – they will be safe there. Then attack the bottom pillbox from underneath with the two grenadiers. When this one has been destroyed send them up the screen to attack the next one. Once this one has been knocked out, send your gliders over to join them. Kill the enemy troops that will attack them; to make this easier you can send your troops upscreen to lure the enemy in front of the pillbox you have just destroyed, and take it over.

Next, send these troops left and over the bridge and down to come up underneath the enemy pillbox and destroy it, then hit the Armageddon button! Some of your troops will run in front of the remaining pillbox and get themselves wiped out, so knock this out and take it over before allowing your troops to attack the enemy base. To speed up the destruction of the base, use the pillbox to attack it as well.

BATTLE 18

Ignore the General's advice, he isn't the military genius that he tries to make out! Firstly, send the transporter with two foot soldiers on board to land just behind one of the pillboxes (again they are programmed to only fire upwards) and set them to attacking it. While this is going on, send the transporter back over the railway track and reload it with two more footsoldiers and do the same to the other pillbox. Then take over both pillboxes and let them wipe out the enemy troops. Next send the transporter with another two footsoldiers on board towards the train control box, hit the switch to turn it off, send all your troops over to kill the remaining enemy soldiers and finally hit the Armageddon button. Total victory! You will also only need one transporter to complete this mission.

BATTLE 19

This level can be completed just by letting the enemy troops come to you. Again, blockade the bridge next to your base and let them run into your troops. Or you could send your troops down to the first pillbox and take it over, if you wish to end the level quicker, and then move on to the next pillbox and take that as well – either way is just as effective.



The Klutes are on the rampage. Or some of them anyway. The others are hiding.



Ha ha! The Furfurians attack the Klute base. The Klutes have flower stems for cover.

"...send all your troops over to kill the remaining enemy soldiers and finally hit the Armageddon button. Total victory!"

BATTLE 20

First action should be to take over the pillbox, then send a troop to fire a shot at the enemy tank. Then make him run towards the pillbox to lure the tank onto it, and the rest of this level is easy.

BATTLE 21

Use your footsoldiers to take out the enemy troops on your side of the tracks (not forgetting to waste the enemy's grenades while doing this). Next, stop the train between the two far right pillboxes, hide two grenadiers behind the train where they will be protected from the pillboxes' fire, and throw grenades over the top of the train to knock out both pillboxes. Take over the far right pillbox, then, after clearing some mines, lure the remaining enemy troops towards it and finally press the Armageddon button.

BATTLE 22

Send your troops diagonally down to the right to fill the gap near your base, wipe out the troops that the enemy sends against you then move all your troops down towards the bridge to attack the enemy there. Next: Armageddon. Simple.

BATTLE 23

Quite hard this. The best troop combination for this level is three gliders, both grenadiers, the troop transporter and four footsoldiers. Send your four footsoldiers to the right to take care of the four enemy grenadiers that fly over. Take out the top two first, after sending one troop on ahead of the others to waste their grenades.

Next, send your three gliders up the cliff, landing them right on the ledge so they don't stay in the air too long and get shot down, then use them to take out the anti-aircraft gun. Send the rest of your troops over to join them in the transporter, (leave the grenadiers behind for now), also taking the chance to repair any damaged troops, then move all your troops to the far left of the map. When the enemy tanks head towards your troops, send the grenadiers over in the transporter to land just past the pillbox, near the enemy base, and attack it. Once the pillbox is destroyed, send any troops left towards the enemy base, and press the Armageddon button, to take over the pillbox on the way.

The remaining enemy troops should chase your troops and then get wiped out by the pillbox, although it doesn't really matter, as the mission objective is to destroy the enemy base.

BATTLE 24

As the General said, no advice really needed, though don't send your troops straight across – attack

continued overleaf ➡



'Rubber band' your troops to give collective orders. Effective and very time-saving.

Helping Hands

LEGENDS OF VALOUR



I've been stuck on Legends of Valour for about a year now. I'm at the point when all I can ask is "Where's Sven?" and everyone says he's left. Can you help?

Alexi Tzitzas
Dunkinfield

Erm, sorry Alexi, no. Here's a neat cheat though: find some treasure and pick it up, then find a person and throw the treasure at them. Now they'll drop a bag of money! Women usually carry the most money too.

PUSHOVER

I have terrible trouble with the game Pushover. Can you please give me the level codes for level 13 and onwards?

John Leyland
Milton Keynes

Well, not all, but here are a few:

13 05634	14 04610	15 04098
16 12290	17 12802	18 13826
19 13314	20 15362	21 15878
22 14854	23 14342	24 10246
25 10758		

Walker



I would be most grateful if you could supply me with some hints or cheats for Walker?

Stephen Yendle
Trowbridge

Certainly Stephen because I used to live in Trowbridge. Ahem. Oh yeah, as soon as you appear on level two (don't move the walker at all) type EAT LEAD MUDDY FUNSTER.



LEND A HAND

If you're having trouble with a particular game or have a solution to a question in the magazine, don't keep it to yourself, write it down or send it in on a disk and we'll do our best to print it.
HELPING HANDS • Amiga Format
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A mass attack by a whole wedge of Klutes on the Furfurian top left. Tee hee.



Yes well, it's only the start isn't it? I mean it's just a picture. I got loads further. No, really!

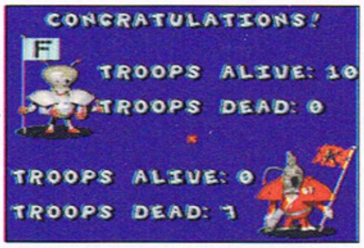
the enemy as he flies over to your side of the tracks.

END OF LEVEL BOSSES

LEVEL 1, BATTLE 14

▼ SNAIL BOSS

Easy, just set all your troops on it, they can take him no problem. Prepare to move them out of its way if it decides to charge at them.



It's embarrassing to lose your whole squad without taking a single enemy with you.

"If you try to use all of your troops to attack the train at once, you will find it very difficult to control them..."

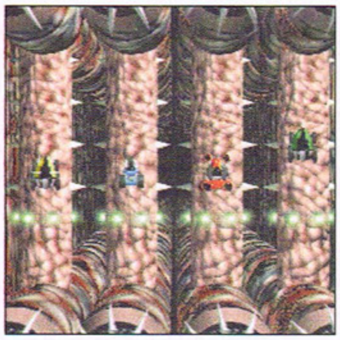
LEVEL 2, BATTLE 25

▼ TRAIN BOSS

Just use a few troops at a time to attack the train and scatter the rest of them between the different layers of tracks. If you try to use all of your troops to attack the train at once, you will find it very difficult to control them, with a lot of them putting themselves directly in the train's path and getting themselves killed. It will also be much easier if you have the game speed on slow. There is a large element of luck on this level, so just keep trying 'till you get it right.

We'll finish the *Tiny Troops* solution next month, so don't forget to join us then.

Burnout



Cars racing up spikey erm, poles or something. Very odd indeed.

On the title options screen, hold down the left mouse button (or joystick firebutton 1) and press the following function keys to activate the following cheats:

F1 Gives 10000 for a head to head instead of the normal 5000

F2 Activates the Slide Mode, where none of the cars have any friction.

F3 Stops the computer-controlled cars using their weapons.

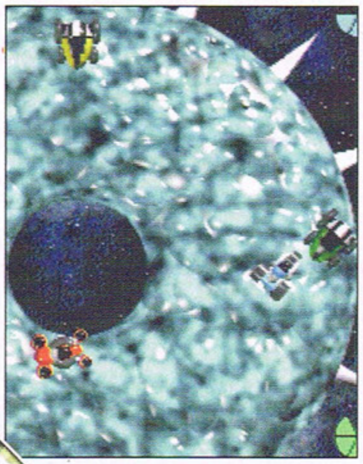
F4 Turns off all the bonus stages.

F10 Turns off all the cheats and resets everything back to normal.

Mark Sheeky via Internet

Red's fighting from the centre so has the upper hand. Green'll have to be sneaky.

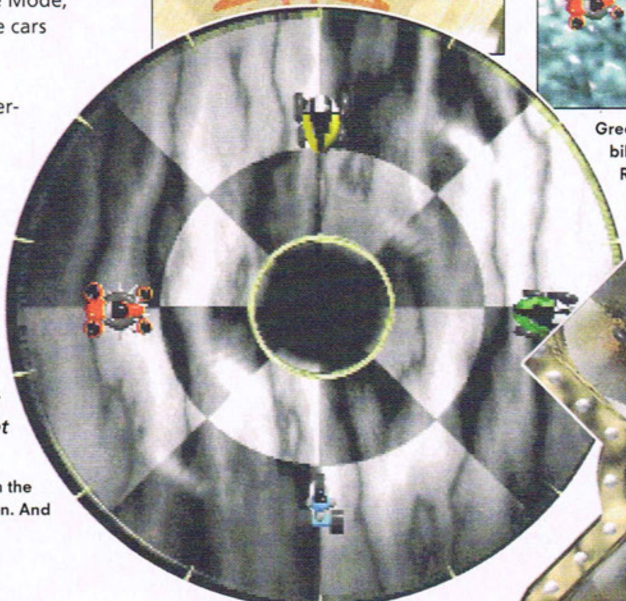




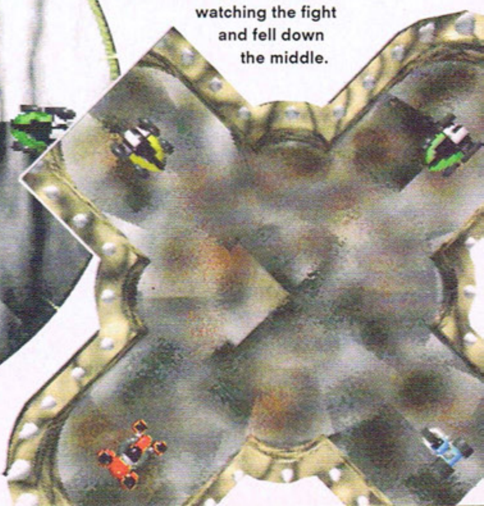
Green wished he'd never called bikers, especially trike riders, girls. Red however, was too intent watching the fight and fell down the middle.



If yellow, red and green all got together, blue wouldn't stand a chance here.



It's a game of 'first to go down the pan!' In this instance, blue won. And promptly died. Oops.



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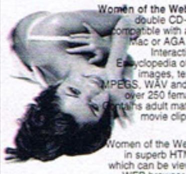
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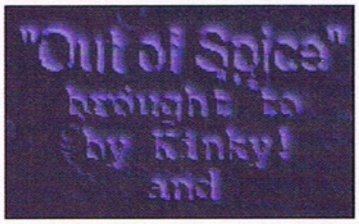
Dave Cusick loves Radiohead, so he's clearly just the sort of thoughtful individual suited to examining the very latest PD and Shareware releases.

OUT OF SPICE

By .... Kinky
Ware .... Freeware
PD Library .... SaddleTramps PD
No of disks .... Two
Price .... £1.60 + 50p P&P



Baby Spice managing to look glam while biting her nails.

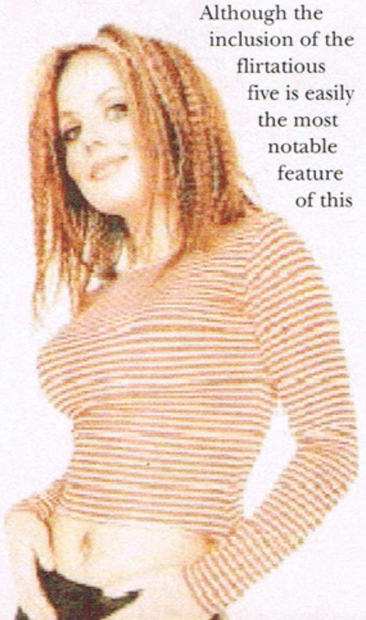


There are some clever bubbling effects if you get bored of Scary Spice.

In the twelve months or so since they first burst onto the chart scene, the Spice Girls have done it all. They have broken chart records set by artists as diverse as Frankie Goes To Hollywood and the Beatles; they have earned the adoration of hordes of pre-pubescent girls all around the world; they have been splashed all over the tabloids (some of them in rather underdressed states); they are about to make a movie; and they are even going to make a Christmas Special for the BBC in which they mingle with celebrity chums and perform some of their hits.

While in general I have nothing but disdain for engineered pop groups, formed not as a result of like-minded, skilled musicians pooling their talents, but instead thrust together by a record company following extensive auditions, I have to confess I find it hard to hate the Spice Girls as much as any of their many imitators. It cannot be the hopelessly vague (and scarily Thatcherite) semi-political "Girl Power" rantings of the Spice Girls in journals such as the New Statesman which endear them to me; neither can it be Posh Spice's alleged engagement to Manchester United midfielder Dave Beckham, because if anything, it seems to have affected his play adversely. I suppose it might be that, like most red-blooded males, I find it hard to resist Geri in her Union Jack frock.





Anyway, love them or hate them, now you have the chance to experience the Spice Girls on your Amiga. *Out Of Spice* is a well put together demo which includes various Spicey images and a tune cobbled together from a lovely breakbeat and what I presume are sampled snatches of their chart-topping album.

Although the inclusion of the flirtatious five is easily the most notable feature of this otherwise unexceptional offering, in fairness there are some nice graphical bubbling and twisting effects in amongst the static images of Spice glamour.

As with all demos, the chances that you will still be loading this up regularly a few weeks from now are fairly slim. At least in this case the demo could serve another purpose: in a few years, when the Spice Girls are as passé as Bros are now, you'll be able look back and wonder what all the fuss was about.

GRAVITY FIGHT

By .... Thorsten Grosch
Ware .... Shareware
PD Library .... PD Power
No of disks .... One
Price .... 50p + 75p P&P



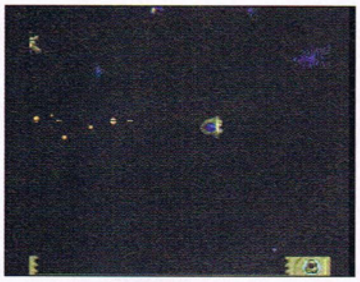


That's your fleet with the green tails – now simply destroy the enemy!

This is an intriguing space battle game. You control a team of three starships out to destroy a team of three enemy craft. The game works using a turn system. At the start of your turn you fire a rocket, specifying the angle at which it will be fired and the force with which it will be launched. The flightpath of this rocket will be influenced by any planets it passes nearby, and as you would expect, larger planets exert a greater gravitational pull on rockets than smaller ones do.

Once you have fired a rocket you can move your starship, providing

Continued overleaf ➡





Disappointingly, the configuration screen looks rather dull.





Your mission is simple – fly around and destroy everything in sight!



Identify all the notes and then enter your name into the Hi-Score Table.

you have sufficient fuel left in the tank. Then a computer-controlled ship will have a turn before you can take control of your next craft.

Gravity Fight may sound fairly simplistic but it is actually surprisingly engaging. The interface is clear and intuitive, making the game immediately accessible, and with well-drawn graphics and slick, smooth scrolling, *Gravity Fight* has a very polished feel. The sound effects are perhaps a little on the disappointing side, but overall the presentation is hard to fault.

Since the game is Shareware, the freely distributable version has a few features disabled. The full version features a two player mode as well as plenty of different levels. Costing a very reasonable 10DM it represents excellent value for money. The laid-back pace of the action should help endear *Gravity Fight* to fans of strategy games, while the two player option guarantees it a degree of gaming longevity.

CAPTAIN CUSTARD

By ....Fukdup Productions
Ware ....Freeware
PD Library ....PD Power
No of disks ....One
Price ....50p + 75p P&P

A cracking shoot-em-up from a programming team with a slightly dubious name, *Captain Custard* is apparently loosely based on an old arcade game called *Time Pilot.*

The basic aim of the game is to hurtle around shooting enemy starships and mines, while avoiding hitting them. You can increase or decrease the number of enemies to suit your ability, and you can also alter a great many cosmetic details so that the game plays as smoothly as possible on your machine – for instance, owners of faster Amigas will be able to play with scores of stars shooting by in the background. The configuration menu itself is a rather ugly affair which seems prone to various display glitches, in contrast with the game itself, which boasts some fairly attractive graphics.

As a veteran of various *Thrust* clones (such as *Roketz, Bratwurst* and many others) I must confess I found the control system a little difficult to get the hang of. Whereas traditionally pushing the joystick right and left causes your craft to rotate clockwise and anticlockwise, here your craft simply moves in whatever direction you push your joystick. While this might sound more instinctive, in reality it seems anything but, and you may find *Captain Custard* quite infuriating initially. However, as with many other aspects of the game, the control system is at least configurable to suit your personal preferences; if you want, you can opt to play with the mouse, using a much simpler craft control system.

Captain Custard is a commendable enough offering, although it is neither original or particularly spectacular. Its appeal is a tad limited, but as a fresh challenge for action-starved blasting fans, it might be worth investigating.

BASIC NOTE TUTOR

By ....Gordon McHendry
Ware ....Shareware
PD Library ....5th Dimension Licenceware
No of disks ....One
Price ....80p + 50p P&P

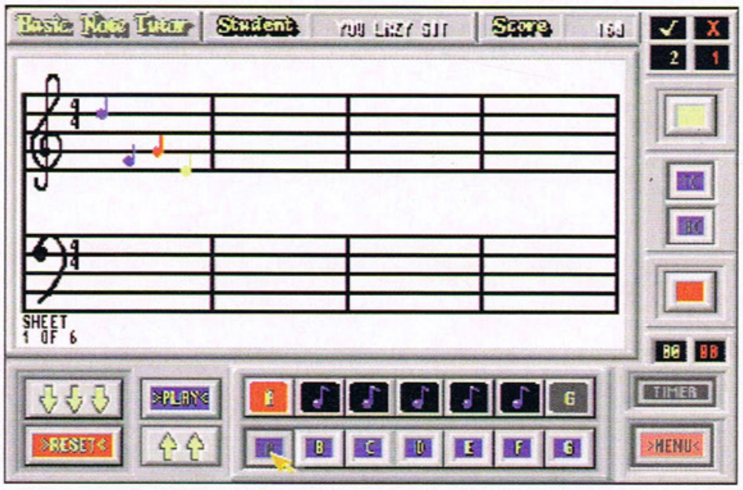
This is a revised version of a program which used to be available as Licenceware. Created in *AMOS Pro,* it aims to teach basic sheet music-reading skills, using a colourful and straightforward interface.

There is an introduction to reading sheet music which newcomers ought to acquaint themselves with before proceeding. At the heart of the program is the testing screen, with treble and bass clef staves, on which various notes are drawn as they are played through your speakers. You must identify these notes using the seven buttons marked A-G at the foot of the screen.

There is an optional time limit to make things more interesting. If you have never read sheet music before, you might want to turn this off initially, but as you become more proficient this can help improve your sight-reading speed. There are several timer settings allowing you varying amounts of time to identify notes, ranging from 24 seconds right down to two seconds.

You can enter your name from the main menu, and there is a high score table so that you can rate your performances against those of other family members or friends. Performance charts are also available, displaying the accuracy with which you have identified individual notes in both the treble and bass clefs.

Basic Note Tutor is a useful and extremely user-friendly program which has a very professional feel. The freely distributable demo version is unrestricted, although requestors appear reminding you to register. Registration costs just £3, and



If you get the name of the note right then it turns blue. If it doesn't go blue it goes red and that means that you've got it wrong! So what's the next one then?



PD selection of the month

DESPERATION

By .... David Crookes
Ware .... Licenceware
PD Library .... 5th Dimension
No of disk .... One
Price .... £3.95 + 50p p&p



The King of the Island. Your mission is to rescue him.

Desperation is an accomplished flip-screen adventure in the mould of Codemasters' old *Dizzy* games. It is set in 1755 and you play the role of Rob Crucade, who has stumbled across a secret society planning to murder the King. Society members have had him imprisoned on a remote island off the coast of Scotland, and he must wander around the island, exploring it and interacting with its other inhabitants, with the eventual aim of escaping to freedom.

This historically dubious plot makes for a platforms and ladders game in which you must solve various problems to proceed. Some of the puzzles are a trifle illogical – for instance, near the beginning you will find a raw chicken, which you can give to a woman to cook; in exchange she gives you, (of all things), a syringe. Pressing the joystick button brings up your inventory. You can carry four things at once, and can drop objects as and when required. The joystick button scanning is a little oversensitive, resulting in this window reappearing when you want to cancel it, but on the plus side, at least the control system is intuitive and easy to grasp.



The music which plays throughout is bearable although hardly awe-inspiring. The graphics are colourful and detailed, although at times enemy sprites are difficult to spot because they blend with the backgrounds. There are also a few minor graphical glitches, such as rats that appear to be able to move into a wall. This is probably a result of the slightly ropey collision detection which does marr the game a little. However, *Desperation* is still a hugely enjoyable platform romp, and the levels have obviously been sensibly designed so that the game does not become too frustrating. For fans of classic platform exploration games such as *Gods* and the aforementioned *Dizzy*, *Desperation* will offer hours of entertainment.



That's blondie. Talk to her and find out what she has to offer.



Check out the swirling, colourful image in the corner box.

considering how much music lessons cost therse days, this represents excellent value for money.

HOP DISK

By .... *Reflex*
Ware .... *Freeware*
PD Library .... *PD Power*
No of disks .... *One*
Price .... *50p + 75p P&P*

This is a real curiosity. To the accompaniment of a cracking jazz tune, a chappy calling himself Reflex sings a catchy ditty about Grasshoppers, the general thrust of which is that "Grasshoppers are green, not aquamarine." Meanwhile, in a small box in the lower left portion of the screen, various patterns are drawn and colours cycle mesmerically.

The tune is sampled, so the quality is excellent, although it does loop after a couple of verses. The instrumentation is very faithful to the feel of the jazz era. Indeed, in one of those spooky coincidences, I was actually listening to a Duke Ellington CD when I loaded this up and it took me a few seconds to realise that alternative jazz sounds were pouring from my Amiga speakers.

The *Hop Disk* is well presented, quirky in the extreme, and fun for about five minutes before it becomes so irritating that you will be reaching for the reset keys. It is, however, a great way of annoying your PC owning chums, whose expensive systems would be pushed to produce anything more tuneful than this. You will require an AGA Amiga to run it.



Continued overleaf ➡

TOP 10 PUBLIC DOMAIN TITLES

1. Amiga Club International Compilation
2. Virus Checker v8.4
3. Breed '96 (2 disk)
4. Charlie Cat Quickies No. 3 (2 disk)
5. ShareWorld mag No. 8 (2 disk)
6. Vark 15 (2 disk)
7. Black Church (2 disk)
8. EPS 22 (fantasy clipart) (2 disk)
9. Lock Up v4.2
10. LHa Files No. 1

Top 10 courtesy of: Roberta Smith DTP • 190 Falloden Way • Hampstead Garden Suburb • London NW11 6JE

WHERE TO GET THE DISKS

Classic Amiga Software
11 Deangate
Radcliffe
Manchester
☎ 0161 723 1638

PD Power
15 Lovetot Ave
Aston
Sheffield
S26 2BQ

Roberta Smith DTP
190 Falloden Way
Hampstead Garden Suburb
London NW11 6JE
☎ 0181 455 1626

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Goldthorpe
Rotherham
South Yorkshire S63 9BY
☎ 01709 888127
email:
phil@ware5d.demon.co.uk

Other good PD libraries

ST FAX & PHONEWIZARD

By ..Simone Tellini / Matthias Bock
Ware ....Shareware
PD Library ......Roberta Smith DTP
No of disks ....One
Price ....90p + 50p P&P

A great many modems these days are capable of transmitting more than data – many support fax protocols and some even have voice modem facilities. Until recently though, there was very little Amiga software which enabled users to take advantage of these features. Now, in response to enquiries from customers, Roberta Smith DTP have dug out some fax and voice modem software and put it all on a disk.

Simone Tellini's *ST Fax* boasts a whole host of features. Fax pages can be created from image or text files, and edited using specified external programs. Faxes can be scheduled for transmission at particular times, and there is a phonebook in which frequently used numbers can be stored. Received faxes can be viewed and stored on your hard drive for future reference. There is an autoanswer function but you can choose to answer phone calls manually if you prefer, which is probably more suitable for ordinary, non-dedicated domestic lines. There's an ARexx port too.

There is even a special printer driver which converts into a fax file everything which is sent to the printer. Using this it is possible to fax anything which you could print out from another program – for instance, a word processed document, a spreadsheet file or similar. In short, everything one could hope for in a computer fax utility is present in *ST Fax*. Registration costs $35, which is around £20, and if you've ever had to trot down to an office supplies shop to fax some important details halfway around the world, then you'll recognise that in the long run, this isn't a great price to pay to be able to send faxes from home. If you already have a modem then you can find out more at the *ST Fax* Web page, which can be found at: http://www.pragmanet.it/~tellini/STFax/STFax.html

Matthias Bock's *PhoneWizard* can effectively turn your Amiga into an answering machine, provided you have a ZyXEL Voice Modem (which I don't have so I was unable to actually try out the program for myself). The program comes with a couple of english messages and there are apparently more on Aminet.

Using *PhoneWizard* instead of a conventional answering machine has some distinct advantages. For instance, you can play a different message each time the telephone is answered, and you can browse through all your messages whenever you like. once they are stored on your hard drive. Using a touch tone telephone you can also browse through your messages from afar.

The unregistered version of *PhoneWizard* can only record two incoming calls: subsequent callers will hear your message but the modem will then hang up on them. If you want to be able to store an unlimited number of calls you will have to purchase the registered version from the author, which costs 20DM or $15.

EDUCATION-AL

By ....Various
Ware ....Various
PD Library..Classic Amiga Software
No of disks ....One
Price:......................£1 + 75p P&P

This is an interesting collection of programs which might well help you become more wordly-wise.

BioCalc is a program designed to plot out biorhythms – graphs which show when your physical, emotional and intellectual cycles will reach their peaks and troughs. The idea is that these cycles begin on the day an individual is born, and take a set amount of time to complete: 23 days for the physical cycle, 28 days for the emotional and 33 days for the intellectual. Apparently, just as significant as the high and low points are the critical points at which a cycle changes from high to low and vice versa. These last for a day, and during this time people are supposed to be particularly prone to mistakes.

Written in *AMOS, BioCalc* performs its simple role admirably. It has a simple interface reminiscent of the standard Amiga Intuition system, and although the graphs it produces are scarcely works of art, they can be exported as images. As I write this, I'm in the middle of a physical trough (that'd be right), but my intellectual and emotional cycles are reaching their peaks (although you'd be forgiven for not having noticed, given that I've waffled about everything from the Spice Girls to Grasshoppers on these pages).

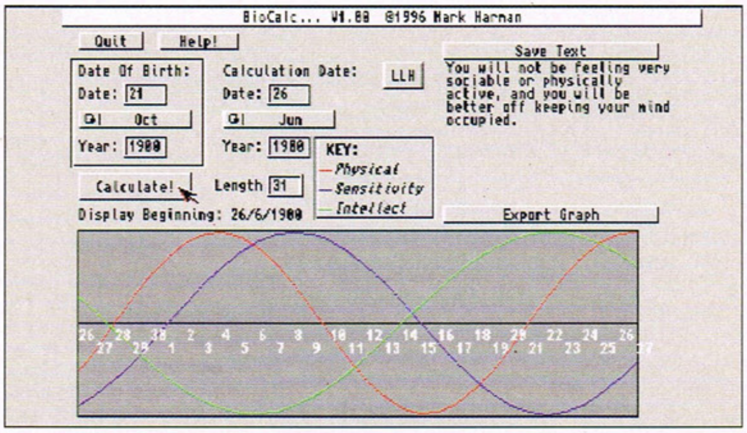
Horsing Around is a horse race prediction program, which aims to increase your chances of winning some moolah on the gee-gees. This is only a Shareware demo, although to obtain the full version you'll only have to send the author a blank disk. Whether it works I couldn't honestly say, but if you frequently find yourself cursing away at the bookmaker's, then it might be worth a look.

Another drawer on the disk contains five documents detailing strategies to employ when playing fruit machines, and reports of tactics and cheats suggested by various Internet users. I'm going to brush up on some of these tips myself, because I can't say I have much luck on the slot machines at my local.

WDTM (What Does This Mean?) is a program which might actually prove useful to non-gamblers too... it contains a database of over 2,600 acronyms and their meanings. As well as sensible information there are some amusing definitions, such as People Can't Memorise Computer Industries Acronyms for PCMCIA. The interface is a little ugly, but this is an extremely helpful program.

A fifth and final drawer on the disk contains a brief guide to CB amateur radio and short wave listening, presented in a thoroughly hideous font. Although CB radio never really took off in the way that fans hoped it would do, if you are interested in this (often overlooked) area then you will find plenty of helpful information. There are also details of various pirate radio stations and international short wave services, so if you fancy listening to something a bit different from Radio 1 then this should give you some ideas.

While its contents seem a little ill-at-ease together and it could scarcely be described as educational in a conventional sense, the curiously named *Education-AL* does include some genuinely interesting stuff.



Well that's about right – I haven't spoken to anyone all day.

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SOFTWARE: Call James for details

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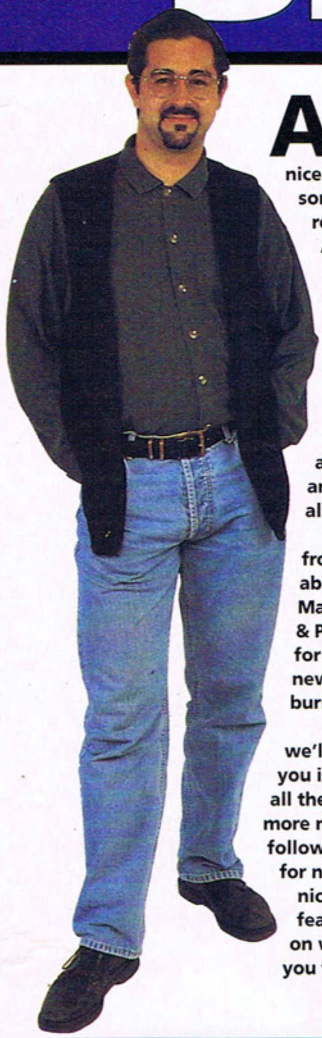
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SERIOUSLY AMIGA



After the shenanigans of issue 100, it's nice to get back to some serious reviewing. Although the summer is traditionally a quiet time for Amiga owners and indeed computer owners all over the world, announcements are running at an all-time high.

We've had news from Blittersoft about *Fusion*, their Mac emulator, Haage & Partner about Java for the Amiga and news about CD-ROM burning tools galore! With any luck, we'll be able to bring you in-depth reviews of all these and many more new titles in the following months, but for now, sit back with a nice cup of tea and feast your peepers on what we've got for you this issue.

Ben Vost

AMIGA FORMAT'S REVIEW POLICY

is very simple. *Amiga Format* is staffed by some of the most experienced Amiga users in the world and what we say goes. OK?

WHAT OUR REVIEW SCORES MEAN

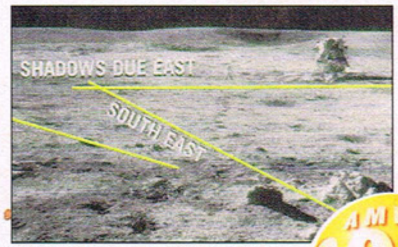
90+%	The crème de la crème. Only the very best, most versatile and effective products are awarded an *AF* Gold – the most highly prized rating there is.
80-89%	These products are very good, but there are minor flaws or areas that could be improved upon.
70-79%	Not a bad product but quite possibly one that needs a serious update.
60-69%	Average products with somewhat limited features and appeal. Products in this category tend to be flawed.
50-59%	Below average products which are unlikely to impress your mates or your wallet. Avoid.
40-49%	Overwhelmingly poor quality products with major flaws.
Under 40%	The absolute pits.

The Hidden Truth

Were there ancient civilisations on Mars? Was the Neil Armstrong moon landing a hoax? Someone out there believes we only know the half of it...



Whoops! Some of NASA's carelessness is caught on film. Notice how the shadows in these faked landings are not consistent.



File: X17/MAJIC
Status: Most secret
Details: Transcript of a meeting held between MJ-12 members
Location: "The Country Club"
Author: Report instigated by code name "Sticky" [194.46.2.24]

Gentlemen, thank you for coming. A member of "PFBT"* known only to us as "the Ponytail Man" handed these two silver discs to our contact, both containing highly sensitive information. We have already instigated internal enquiries to determine how this information was released. It would appear that our attempts to discredit sources of information still have some way to go.

Briefly gentlemen, these discs could pose a serious threat to international security, especially as rumours indicate that both discs will soon be available to the public through the usual channels. They are designed to disseminate information in a way that's entertaining and easy to understand – their large storage capacity making them an ideal medium to store images, sounds and animations.

MYSTERY PHENOMENA

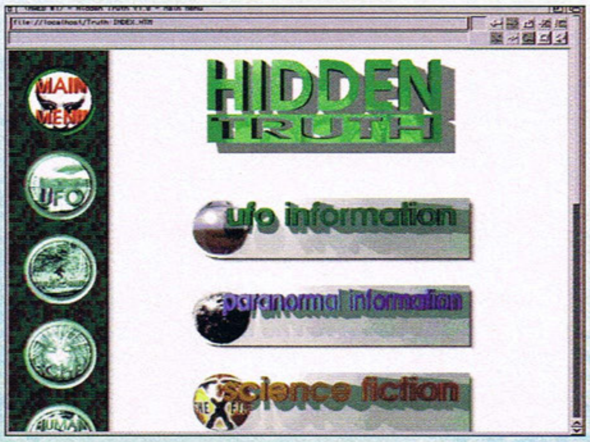
This disc contains information on numerous Black Projects, such as UFOs, Paranormal activity, information on Science Fiction, time travel, ghosts, astral projection, and the face and pyramids of Mars (which bozo at NASA let that one slip? The same one who botched the moon-landing pictures?).

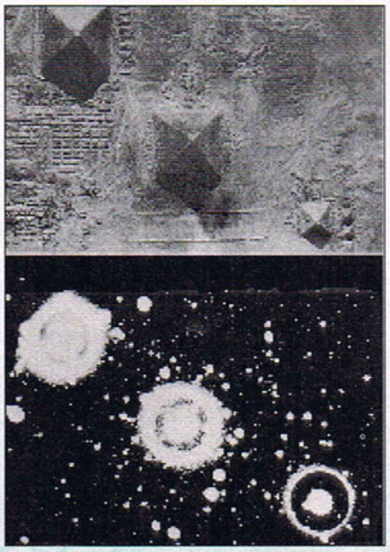
All subjects are presented using the standard Web browser interface, which means the discs can be read on almost any current computer system. The information has been gathered by downloading the contents of several large (and award winning) Web sites, and cross-referencing them where possible. The authors have maximised the damage potential of these CDs, now that Internet access is not needed to view their contents, which are a mixture of well-designed HTML files, plain text, audio files, raw graphics and animation files. They contain more information than several large coffee table-style books.

Luckily for us, the information is prone to misspelling, and includes such gems as: "The anti-gravity field bends the gravity and time slows down. That's why time is missing." We're not sure if there's a spatial compression field applied here. When I watch it, I seem to lose time. I discovered several full novels a short time ago, and spent time watching familiar video footage of our more memorable experiments.

AMIGA GOLD FORMAT

The Hidden Truth uses a Web-based front end. It's flexible, but requires a fast Amiga to decode the images before boredom sets in.





On the top, the Great Pyramids of Egypt. Below, the stars from Orion's belt. Question: why was John Kennedy missing from the 100th Birthday Issue photograph?

DISTRIBUTOR: Sadeness 01263 722169
PRICE: £29.99
REQUIREMENTS: Any Amiga (or other computer) CD-ROM & Web browser

PRESENTATION: ●●●○○
Very slick if your Amiga is fast enough. Sadly most A1200s will need help.

SPOOKINESS ●●●●○
Plenty of distasteful images.

INFORMATION: ●●●●●
Well cross-referenced. Covers a huge number of topics.

THREAT TO CIVILISATION: ●●●●○
Should not be underestimated.

VALUE: ●●●●○
Better than surfing or buying books.

OVERALL VERDICT:
Capable of sending a chill right up your spine.

90%

The Epic Interactive Encyclopedia of the Paranormal



Uniquely, the *Paranormal* disc features an Amiga specific multimedia front-end.

The second subject of our investigation is a disc that's quite a departure from the usual CD-ROM. It is specially designed for the "Amiga" computer, used by a select few: the top five per cent of all computer users we have listed on file.

This disc is presented not as a collection of files stored in raw form or held together by HTML, but instead as a "multimedia experience". The user is able to watch an interactive programme. The information is broken down into six sections, including UFOs, Ghosts, Strange Life, Myths and Legends, Mind over Matter, the Unexplained and Mysticism. Yes, that's seven – it just goes to show how strange this CD actually is.



The mystery remains: just how did a picture of Zoe Ball appear on this highly magnified image of Nick Veitch's scalp?

Each section includes two possibilities: a sit-back-and-watch demo, consisting of an impressive image slide show, complete with music and narration, and a more interactive search section. Sadly, some form of alien interference meant that this section of the multimedia program continuously crashed on the A4000/40 test system. Obviously it will be a worry to us if the system works perfectly on the more popular A1200 system. We managed to retrieve many interesting text files, sound files and some unique anims. Although this disc doesn't seem to contain the same scope as *The Hidden Truth*, it is nevertheless of interest.

"Sadly, some form of alien interference meant that this section of the multimedia program continuously crashed."



In Bath, the local pastime of throwing sleeping people into the air continues, although mostly for the benefit of tourists.

I submit that MAJIC are lucky that multimedia material of this calibre was not available years ago, as it may have prolonged the popularity of the Amiga system, and its band of highly intelligent followers. This disc is dangerous, and should be treated as a serious threat.



Military police are called in as a man tries to break into the midget circus without paying.

CONCLUSIONS

Gentlemen, we can conclude that among the images and text files contained on these discs, there are some elements of truth. We can only hope that the average person will be unable to filter the authentic items from the obvious plants and manufactured items also included.

However, it is clear that the truth is starting to leak. We have therefore included a sub-miniature homing device in each of these CDs. They may appear to be a fraction heavier than other disks, but most users will be unable to detect the difference. In this way we can track the progress of the discs, and have full confidence that the MIB teams can swoop and retrieve any member of the public who seems to be taking the information too seriously. AF

* PFBT = "perpetual fag-break team".

DISTRIBUTOR: Epic 0500 131486
PRICE: £19.99
REQUIREMENTS: AGA Amiga, 4Mb RAM, Dual speed CD-ROM (6Mb, 4x rec.)

PRESENTATION: ●●●●○
Great to see an Amiga specific front-end. Better if it didn't crash.

SPOOKINESS: ●●●●○
Can make your flesh creep.

INFORMATION: ●●●○○
Slightly less in the way of hard 'facts' and a smaller range of topics.

THREAT TO CIVILISATION: ●●●○○
Not as dangerous as *The Hidden Truth*.

VALUE: ●●●●○
Again, beats buying books.

OVERALL VERDICT:
Better than watching Arthur C. Clarke's Mysterious World.

88%

Touch Typist

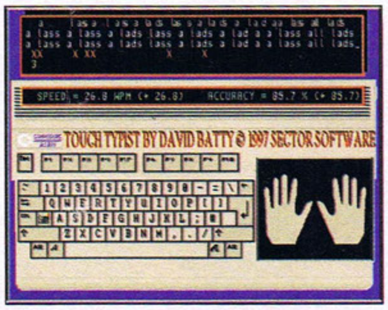
Laerning to typ can b ea tricky busness wen you're not looling at the keyboard. Ben Vost is given a helping hand.

The last touch typing tutorial we reviewed was released over five years ago (*Mavis Beacon Teaches Typing, AF48* 85%), so this one comes as a welcome surprise. *Touch Typist* adopts a more practical attitude to teaching you the 'proper' way to handle those keys. The screen shows a representation of a standard UK Amiga with a typing screen at the top, but with no fluffy distractions like car-racing games or other frippery. The program shows graphs of your accuracy and speed after each lesson, which are stored in the computer's memory. When you start up *Touch Typist* and type in your name, you are treated to a rundown of your fingers' achievements to date. You can even find out which of your digits isn't working hard enough because there's a finger accuracy chart thrown in .

DESIGN QUIRKS

As a program, *Touch Typist* is great. Even the hardened journos around the office clamoured to test their dexterity against the machine (and quite a few had little to boast about). There is good advice on correct posture when typing and recommendations to take it easy – that is, don't do all two hundred and one lessons in one sitting. Unfortunately, as a piece of software, *Touch Typist* is somewhat lacking. While it is easy enough to get to grips with once you are used to its idiosyncrasies, it doesn't perform like a piece of Amiga software should, and this is something that the author, David Batty, should get to grips with immediately. Non-standard menus and shortcuts don't sit well on today's machines. Even so, this shouldn't put you off *Touch Typist* if you want to learn. It's very good and, from my own conversations with him, David Batty would welcome any constructive criticism from users of his products and is willing to implement suggestions.

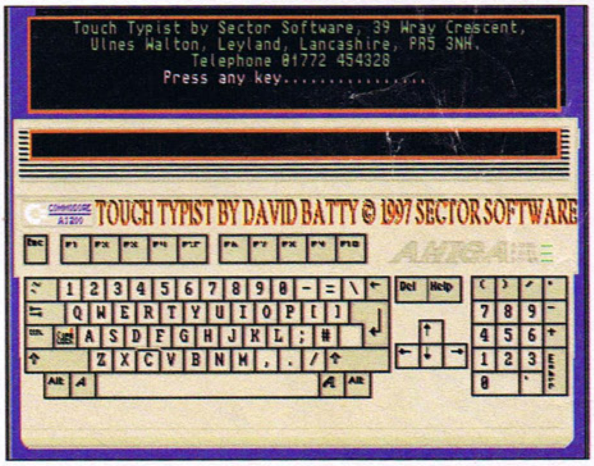
"There are no fluffy distractions like car-racing games or other frippery."



Although *Touch Typist* starts off with nonsense words, it soon gets a bit more sksk.

NIMBLE FINGERS

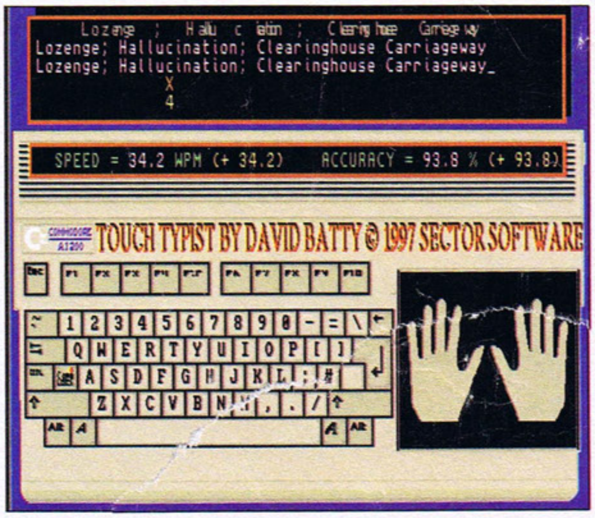
In conclusion then, this is really a piece of software from before the Commodore Style Guide. It doesn't like new machines or odd screenmodes too much, although it runs fine on our A1200 and A4000 (and my 3000T at home). The hard drive installer at present is just an *AmigaDOS* script rather than an *Installer* script and the on-line help should really be in AmigaGuide format to be up-to-the-minute, but all this matters little if you're determined to learn to type speedily. If used regularly, the program will certainly ensure that you get touch typing sussed, but be patient – it's a skill that comes gradually and takes plenty of practice. Personally, since I started using it my words-per-minute speed has risen to over thirty – no steam coming off the keyboard, but a definite improvement.



When you first start *Touch Typist* you'll be asked your name so that it can load up your preferences.

SOME ADVICE

If you're serious about learning how to touch type, one thing that would probably do you a lot of good if you wish to avoid Repetitive Strain Injury (RSI) is a wrist rest. Before I started using this program, I always found that wrist rests just got in the way, but once you find yourself using the keyboard properly, they soon become invaluable. Wrist rests come in many different shapes and sizes, but you can buy them from practically any stationers or office supply shop and they aren't very expensive – certainly not when compared with the very real possibility of strained muscles and achy wrists for the rest of your life.



The squished-up text at the top of the screen shows the timing for your keystrokes. Notice the long pause while typing Hallucination.

DISTRIBUTOR: Sector Software
01772 454328
PRICE: £19.95
REQUIREMENTS: Any Amiga

SPEED: ●●●●○
No waffle beforehand.

MANUAL: ●●○○○
Just on-line help in a non-standard format, but you won't really need it.

ACCESSIBILITY: ●●●●●
Very easy to get to grips with.

FEATURES: ●●●●○
What features do you need?

VALUE: ●●●●●
Typing is a valuable skill. This is an inexpensive program. QED.

OVERALL VERDICT:
Nice software marred by a non-standard interface and an aged look.

87%

CD-ROM round-up

Are they bargains or expensive beermats? Nick Veitch ruthlessly tests the latest CD releases.

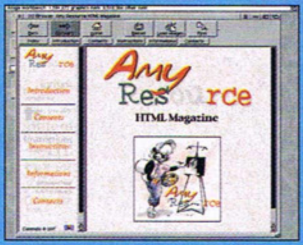
AMY RESOURCES EURO EDITION

Weird Science 0116 234 0682

This CD is volume one of the "European" version of *Amy Resource*, a series of CDs which has been available in Italy for nearly 12 months now. It aims to let the rest of us poor Europeans catch up, by including the best bits of the four CDs released so far.

As with many compilations, you'll find the familiar drawers full of demos, pictures, animations, the latest Shareware and so on. So what makes this CD better than any other compilation?

An interesting twist is the inclusion of some full versions of Shareware software. This means you get the full version, as if you had registered (and presumably the authors get some of the proceeds). Of course you will still need to register to receive the latest versions, and to get put on the authors' mailing lists.





HTML documentation is included (top), as are plenty of Eric Schwartz pics (above).

Perhaps the most significant of these registered Shareware programs is the programming language *AmigaE 3.2*, but you will also find other excellent software such as *WebPlug*, *Image Studio* and *BackMan*.

The CD is big on demos too, with special versions of software such as *DrawStudio*, *PC Task*, *TurboCalc4*, *PPaint 7.1*, *StormC*, *Art Effect* and *PCx* amongst others.

There is some on-disc documentation which takes the form of an HTML document. It does, contain frames (ugh), but fortunately, special versions of *IBrowse* and *AWeb* are included, so you can view them even if you don't have a frames capable browser.

Although the CD is 650Mb full, there is a bit of duplication. Many of the files included in the software drawer are also included in the archives drawer in their distribution format. The only other major omission is a file finder or some sort of comprehensive AmigaGuide, so you can find things easily.

One of the most impressive things about this CD is the way various documents are handled. You can set up preferences from a special program on the CD, for default text viewers, MOD players and so on. These are stored on your Workbench disk, so you never have to set them up again (unless you want to change them).

This CD is well put together and a lot of thought has obviously gone into, not only the composition of the CD, but also its presentation. Interactive deserve top marks.

AMIGA FORMAT GOLD

VERDICT 95% £19.95

APC&TCP VOLUMES 1 & 2

Epic 0500 131486

Some of the first volume isn't really much use at all unless you speak good German. There are some disk magazines, including a representation of the Nocover mag, as well as some AmigaGuides and some German only software. Perhaps you'd best get using the Shareware *AmiTrainer* included on the CD, which helps you learn a foreign language.



There are plenty of AmigaGuide files that are in English (or Italian) too, but they are not all strictly Amiga related. However, if you want to check out some of the stranger FAQs to be found on the Internet, this should give you some idea of what's out there (though I think the chap who has created a complete Pink Floyd discography, including lyrics, may have gone a little too far). From hard drives to Draco, from Nirvana to the Simpsons – there's all sorts of stuff buried in here.

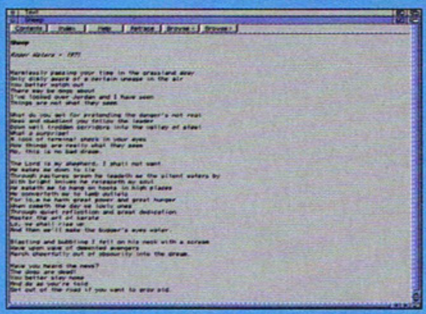
On the whole, this is far from an essential collection, but it is certainly different, mainly because large amounts of the stuff here didn't come directly from Aminet.

If you are looking for a huge collection of images, then the second volume is the one you want. There are hundreds on here, ranging from the quite terrible to the quite good. There are, of course, plenty of rendered images but also a number of "hand-drawn" examples. Almost all images are supplied in GIF, IFF and JPEG formats.

Some of the artwork you may have seen before, but there is a whole drawer full of stuff by members of the APC&TCP club, which you probably won't. Certainly, they seem to have some talented members if the artwork of Thomas Fruwacht and Michael Zimmer is anything to go by.



This makes a nice change from the usual "*Aminet* rebundled" CDs, but there isn't really anything unmissable.





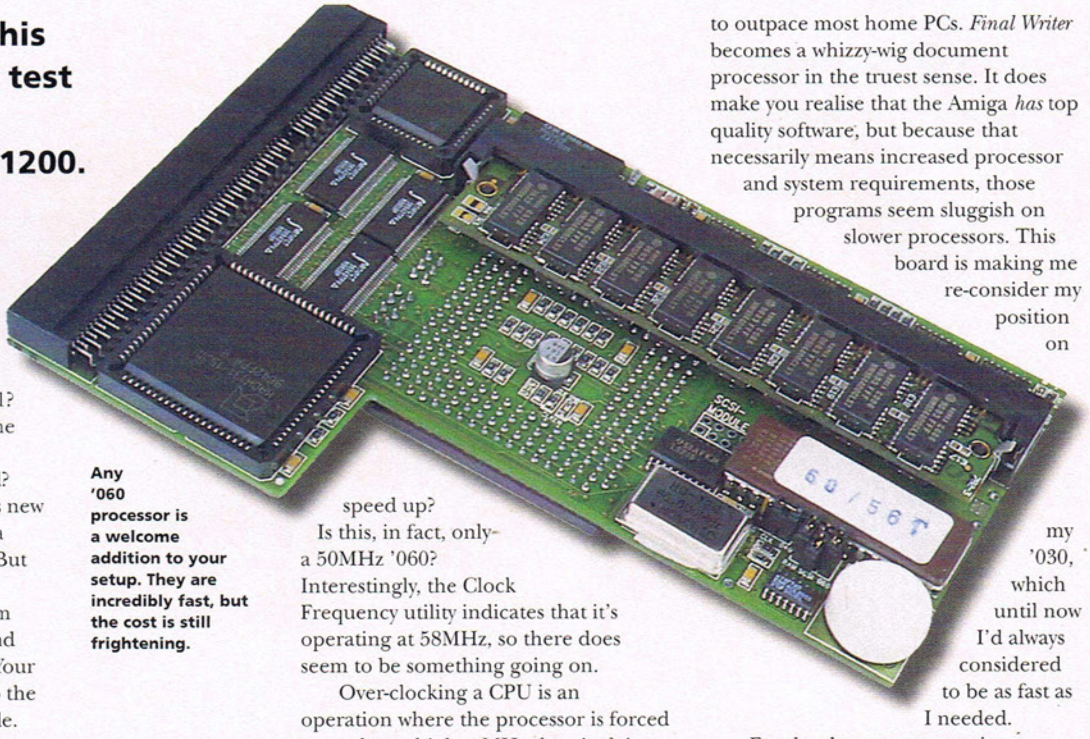


Weird AmigaGuides and weird artwork abound on these two CDs.

VERDICT 76% £7.99 Each

Apollo 1266

David Taylor puts his racing gloves on to test drive this new '060 processor for the A1200.



Any '060 processor is a welcome addition to your setup. They are incredibly fast, but the cost is still frightening.

The Amiga is still the leading computer for usability – just consider the ease with which you can upgrade your computer's processor. Intel's Socket 7 or Slot 1? Pah. How about simply opening the trapdoor on the bottom of your machine and sliding in a new card?

Like all other accelerators this new Apollo from Eyetech can require a determined push to slot it home. But once you have made sure the connectors line up, just jiggle them until you feel them start to lock and then give it a good shove. Bingo! Your '020 processor is transformed into the fastest Motorola processor available.

However, there are some serious issues with this board. The first is a question of build quality. Apollo boards have always looked slightly cheap and cheerful but have proved competent and reliable, and this one is no exception. It also has a module slotted on the back that requires a sheet of plastic to be stuck to it (supplied) so that it doesn't short out. This module seems very loose, but as long as you don't swing your Amiga round your head, this won't be a problem.

> **"Are the manufacturers up to their old tricks again, pushing the clock speed up?"**

MONEY MATTERS

When you compare the price to other accelerators, you'll see that while previous Apollos beat the others hands down, this one costs the same. This is due to the cost of the '060 processor itself and it means it's harder to justify buying this board – the only obvious bonus being the greater speed increase.

The board comes in 50MHz and 66MHz clock speeds. Motorola do not manufacture 66MHz '060s, and the processor used in this accelerator is actually a standard '060 rated at 50MHz. Are the manufacturers up to their old tricks again, pushing the clock speed up? Is this, in fact, only a 50MHz '060? Interestingly, the Clock Frequency utility indicates that it's operating at 58MHz, so there does seem to be something going on.

Over-clocking a CPU is an operation where the processor is forced to work at a higher MHz than it claims to be able to handle. An '030, for example, can be forced to work at a higher clock rate without any noticeable difference except the generation of a bit more heat. It may however cause system crashes and this is where the problems start.

This is not to say that the board is dangerous or is going to burn your house down. But you should know before you buy it that the processor is being pushed beyond the limits set by the manufacturers.

In operation, it's hard to fault it. Some programs simply don't work with the '060 processor, although the only problem I had was with the *Setpatch* program, that the system uses at the beginning of the Startup-sequence - this was simply because the installer which installs the necessary '060 libraries isn't immediately obvious. Some older software is bound not to work on an '060, though almost all non-games software written in the last two years should be fine.

BURN OUT

Aside from these niggles, the new processor worked fine. We'd like to keep the board for long-term testing to see if it does cause problems, because of the clock speed concerns, but in the short term, the Amiga flew. Graphics programs like *Art Effect*, normally slow but useable, are suddenly fast enough to outpace most home PCs. *Final Writer* becomes a whizzy-wig document processor in the truest sense. It does make you realise that the Amiga *has* top quality software, but because that necessarily means increased processor and system requirements, those programs seem sluggish on slower processors. This board is making me re-consider my position on my '030, which until now I'd always considered to be as fast as I needed.

For development to continue, however, we will have to be looking elsewhere, because this is the last in the 68000 series. It's a blinding board, and is wonderful to use, but it's still expensive when you consider that you are buying into something that only has a short-term future. Maybe it would be better to hang on for a PowerPC board – but how long will we have to wait for them?

DISTRIBUTOR: Eyetech
01642 713185
PRICE: £399.95 (No RAM)
REQUIREMENTS: A1200

SPEED: ●●●●●
It is faster than it should be – but is this a plus?

MANUAL: ●○○○○
Just a single sheet of A5.

ACCESSIBILITY: ●●●●●
How hard is it to push an expansion card home?

VALUE: ●●●○○
Same cost as others but looks cheaper and may be operating outside of proper parameters.

OVERALL VERDICT:
The fastest Amiga ever but where has the '060 66Mhz processor come from?

80%

Eyetech's Summer Sizzlers Accelerators? Forget '030/50's - get ~3 x the power for £159.95! - '040/25MHz (19 MIPS) £159.95, 51 Mips '060/66MHz £399.95; Forget mem boards! - '030/MMU/FPU 25Mhz- £69.95, 33MHz-£79.95; New DIY-EZ-Tower from £99.95; 8-speed CDPlus £149.95; A1200 high speed serial port £49.95; 14.4K modems £24.95; SX32 from £159.95; RED=Price down , Blue=New product.

The All-New Eyetech EZ-TOWER

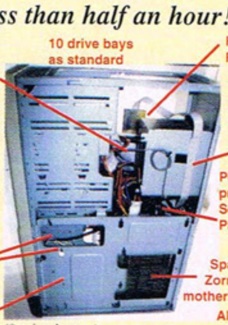
"This definitely one of the easiest solutions to building your own tower." John Kennedy, Amiga Format - July 1997

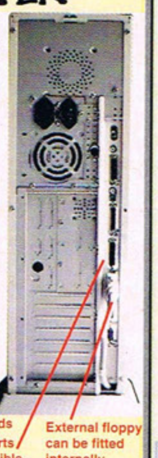
If you can use a screwdriver you could build your own A1200 tower system in less than half an hour!

It Couldn't be Easier!

- Remove the case top and keyboard ribbon cable *(No shield removal required).*
- Slot in the ribbon cable from the optional PC/ Amiga keyboard interface.
- Mount existing and new hard and floppy drives and CDROM units in the bays using the screws provided.
- Connect up the drives power and data cables.
- Clip in the A1200 motherboard/base into the custom backpanel.
- Push on the power/HD/ FDD LED adapter and the A1200 power connector.
- Put back the outer case. Thats it! ...

Now You've Got Tower Power!





(*optional extras)

NEW! Mk2 EZ-Tower with Squirrel external connector option and 250W PSU - *still only £119.95*

EZ-Key A1200 adapter for PC & Amiga kbds- just push in the ribbon cable!	£39.95
7 x Zorro II slots expansion board - including 5 x PC ISA slots for GG2 bridgeboard, ethernet etc. *With accelerator pass-through.* Fits most towers.	£179.95
Single Zorro II slot adapter for graphics card - *with accel pass-through.*	£99.95
- as above with built-in *EZ-Key* i/f (Both available August 1997)	£134.95
EZ-DF0 A1200 tower DF0: diskette drive with faceplate, cable and interface	£44.95
Squirrel adapter for EZ-Tower - with int HD/CDROM & ext Centr's 50w skts	£19.95

...Or buy a CDPlus unit (below) and get an EZ-Tower for just £99.95*

(*as an alternative to the regular CDPlus case)

SX32Mk2 & SX32Pro *Internal* Expansion for the CD32

STOP PRESS!!!

The Award Winning SX32 Pro is now even more affordable

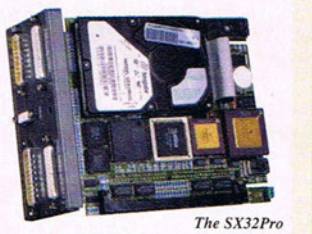
The SX32Pro and SX32Mk2 add ...

- 33 or 50MHz '030 MMU CPU and FPU socket (33Mhz FPU socket only on the SX32Mk2)
- Simm socket for up to 64MB of 32 bit fast (60/70ns) RAM (up to 8MB fast (70ns) RAM on the SX32Mk2)
- Buffered IDE interface for internal 2.5" hard drive ***and*** second hard drive, SyQuest, Jaz *or even 8 speed CDROM* (optional extra on the SX32 Mk2)
- Sockets for RGB video (23 pin), VGA video (15 pin), Parallel port (25 pin), Serial port (25 pin), Floppy disk port (23 pin)
- Jumper-selectable for PC or Amiga keyboard input (external adapter on SX32Mk2)

... to the CD32's existing mouse, joystick, keyboard, audio, RF, composite video and SVHS ports.

What do the reviewers say?

Amiga User Int'l	*"95% - Definitely Recommended"*
Amiga Computing	*"90% - A Dream to Use." Blue Chip Award*
Amiga Format	*"96% - Absolutely Top Notch" Gold Award*



The SX32Pro

SX32Mk2 - *sale price* - £159.95

SX32Pro-50 - *sale price* - £299.95

Genuine Amiga 89-key compact keyboard *£34.95*

SX32 floppy, hard drives 20MB-1.8GB, RAM - *Please ring*

All models include full pictorial fitting instructions,WB3.0 & utilities on CD and 'Click-and-Go' hard drive installation diskette

Special CPU purchase Limited Quantity - SX32Pro-40SE. A Special Edition SX32 Pro with 40Mhz '030EC processor (no MMU) - *Just £269.95*

AMIGA HEALTH WARNING

If you have recently fitted - or intend to fit - an IDE/ATAPI CDROM to your A1200 *(other than an Eyetech CDPlus unit)* **without** a buffered interface then your Amiga is in risk of serious damage arising in the future. The A1200 - unlike A4000's and PC's - has *NO* internal IDE buffering. On the A1200 the IDE interface connects ***directly*** to the A1200 processor & custom chips *AT ALL TIMES* which have insufficient output to drive more than one IDE/ATAPI device (and only then on a short data cable) for any sustained time period. We are now making the Eyetech *Mk2* 4-device buffered interface available separately for use with other kits and D-I-Y CDROM installations. At only £39.95 it is a small price to pay to preserve your Amiga's health.

"A buffered IDE interface is essential to avoid overloading of the A1200's IDE port when adding extra devices" - John Kennedy - Amiga Format - July 1997

The Top-Rated Eyetech *CDPlus* for the A1200

- 8- or 12/16- speed external CDROM unit in quality, CE-approved case with heavy duty PSU
- Leaves trapdoor free for accelerators / memory expansion and the PCMCIA slot free for digitisers, modems, samplers etc
- Option to add additional HD's, CDRoms, SyQuests, *IDE Zips*, Jazs, SyJets, ATAPI tape streamers etc powered from the CDPlus unit
- Comes with special Eyetech *'060-compatible* Mk2 4-device EIDE buffered interface board - easily fitted in minutes with no cutting/drilling (Note that IDE CDROMS *must never* be directly connected to the A1200 without a buffered interface - ask any qualified electronics engineer!)
- Gold plated audio phono sockets at rear (CD+ only) and front panel headphone socket and volume control



The CDPlus and SyQuest EZ135 drives. The IDE Zip Drive is the same size as the EZ135

Amazing Value 8-speed - *only* £149.95

NEW! 12/16-Speed - 2.4MB/s (max) -*only* £179.95

Considering a PowerStation?

The CDPlus is now available with a, 230W, CE-approved, PC MiniTower* or Desktop* case (which can also power your A1200) - *for only £20 extra*

(*as an alternative to the regular CDPlus case)



What do the reviewers say?

Amiga User International - *97%*

"... It all worked faultlessly ... "

Amiga Format - *96%*

"... An absolutely superb bit of kit.."

Amiga Shopper - *90%*

"... This is a quality product..."

The Amazing Iomega *IDE* Zip Drive

Another first from Eyetech

- *Can be used in place of - or as well as*- the internal hard drive*
- *Use a different bootable cartridge for each application or family member*
- *Ideal for transferring multimedia data between Amigas and/or other platforms*
- ***Fits in any Amiga/desktop/minitower floppy drive bay or in external case***

CARTRIDGE CHANGES AUTOMATICALLY RECOGNISED!



The IDE Zip drive fitted in an A1200

Bare IDE Zip drive *(inc Eyetech V2.0 Ziptools)* **- Just £119.95**

100MB Zip cartridges just £14.95/1 or £39.95/3 (*A600/1200 buffered interface needed)

A1200 *InstantDrives* & *TowerDrives*

InstantDrives and *TowerDrives* are *only* available from Eyetech



"The fastest drive I have tested on any platform ...95%" - David Taylor - Amiga Format February 1997

Important Notes!

Thinking of buying a **BIG** drive? Dont waste your money on ***ANY DRIVE OVER 4.1GB*** as the Amiga O/S doesn't support it! (2^32-1 bytes actually). Be warned!

3.5" hard drives - even those described as *'Slim'* - are usually 1"/25mm high and ***will not*** fit in an A1200 without significant modifications to the case and metal shielding - which itself reduces the value of your computer.

- InstantDrives require no hole drilling, case clipping, or shield removal required and come Inclusive of full fitting kit and easy-to-follow pictorial instructions
- All drives come ready-to-use with WB3.0 preinstalled & WB2.x install script.
- All drives over 350MB also come with over 45 top quality utilities (not shovelware) ***and*** MMe multimedia authoring software preinstalled, configured and ready-to-run.

InstantDrives:		2.56GB AV(~3MB/s)	£229.95
TowerDrives:		1.7GB	£159.95
2.11GB	£189.95	3.2GB	£199.95
4GB - Take your Amiga *to the limit!* - for just			£279.95

2.5" InstantDrives for the A600, A1200, SX32 & SX32 Pro

344MB	A 2.5" drive ideal for the SX32Mk2 and for the A1200/A600	£109.95
540MB	A fast, superslim drive with ample capacity for most users	£139.95
810MB	A superb, superslim drive ideal for users of serious applications	£169.95
1.08GB	The high performance superslim drive is ideal for power users	£189.95
1.8GB	This top-of-the-range superslim drive is perfect for the SX32Pro	£209.95

D-I-Y and Bargain Corner

Hard-to-find parts for your Amiga project

Hard , floppy drive cables and cases	
2.5"-2.5" 44-way HD cables for A600 & A1200 9cm £8.95, 13cm	£9.95
2.5" 3x44-way hard drive cables for 2 x 2.5" drives (6cm+6cm)	£14.95
3.5" power & data cables for A600 & A1200	£14.95
3.5" full fitting kit for A600 & A1200 (contains ***everything***)	£24.95
3.5" external hard drive case	£19.95
3.5" removeable drive deluxe external HD case	£24.95
Metal CDROM case (no psu)	£4.95
3 x 40-way IDE cable for 3.5" HD/CDROM ~85cm/2' 9"	£9.95
Custom 3 x 40 IDE cables to 1.5m/5' (enclose drawing)	£19.95
3.5" hard drive to 5.25" bay mounting adapters	£6.95
2.5" hard drive to 3.5" bay with 3.5" data/power cable adapters	£12.95
3.5" floppy/SyQuest/Zip drive to 5.25" bay mounting adapters	£6.95
40 pin m-f detachable data cable forexternal 3.5" HD/CDROM's	£12.95
Slimline external floppy/IDE SyQuest/IDE ZIP/IDE Jaz case	£9.95
SCSI cable 25way 'D'(m)to 50way 'Centronics' (m) (1m)	£9.95
2 x 34pin-F, 0.6m ribbon cables for mounting DF0: in tower	£9.95
23p-M to 23p-F external Floppy ext'n cable **0.6m £12.95; 2m**	£14.95
Audio & video cables and adapters	
3.5mm stereo jack plug to 2 x phono plugs for CDROM	£6.95
CDROM standard 4 pin inverted T audio connector & phono plugs	£9.95
Phono plug x 2 to phono plug/socket x 2 audio mixer leads	£6.95
2 x phono socket to phono plug mixer adapters (Gold **£3.50**)	£2.50
Stereo 2 x phono plug to 2 x phono plug 1.1m/4' (4.8m/16' **£9.95**)	£4.95
Stereo speakers (pair), with amp (16wPMPO) & mainspsu	£9.95
Power supplies , cables and PC towers//desktops with integral psus	
IDE or SCSI CDROM case, 40w PSU, audio & data connect's	£59.95
Enhanced metal cased PSU for A600/A1200/CD32/CDROM/ external HD (fit your old lead - instructions provided)	£34.95
Mini-tower or desktop case with 200W/230W PSU, CD & HD/Zip bay, power lead connector block, resistor, cable restraint etc, & full instr'ns	£39.95
4-pin M-F extension cable from PSU to external HD/CD 0.9m/3'	£9.95
23 pin m floppy drive connector to 4 pin HD/CDROM power plug	£9.95
Miscellaneous	
A1200 /SX32 internal cooling fan - dissipate that extra power!	£14.95
VGA 23-15 pin adapter for A500/600/1200 **£12.95;** buf for A4K	£19.95
A2000 keyboards (new) for A2000/3000/4000* (*adapter +£5)	£49.95
50MHz capable PGA FPU for SX32Pro-50 or accelerators	£39.95
Amiga CDROM disks - our selection - 5 for	£10.00
A1200 RAM boards (clock, FPU skt)	£29.95
Amiga microswitched mouse with mousemat	£9.95
A1200 Workbench 3.0 disks (5) with WB3.0 & user manuals	£19.95

Two new A1200 Expansion Products from Eyetech

PortPlus - high speed serial and parallel port expansion

- *2 x **460Kbaud** buffered serial ports with low CPU overhead*
- *PC & Amiga compatible parallel port transferring up to **500K bytes/sec***
- *Optional high speed PC-Amiga & Amiga-Amiga **networking software***
- ***Leaves PCMCIA & trapdoor free** ; accelerator friendly & very easy to fit*

PortPlus* - *just £89.95! (WITH parallel port driver!)

New! *PortJnr*- 1 high speed serial port - *just £49.95*



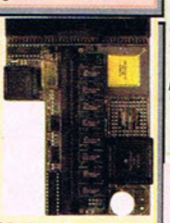
Apollo Accelerators - Unbeatable pricing

Entry level A1200 Accelerators - Unbelievable value

25MHz '030 with MMU & FPU. (5 Mips)	*- Just* £69.95
33MHz '030 with MMU & FPU. (7 Mips)	*- Just* £84.95
Power User A1200 '040/'060 accelerators (no tower req'd)	
25MHz '040 with MMU & FPU. (19 Mips)	*- Only* £159.95
33MHz '040 with MMU & FPU. (25 Mips)	*- Only* £179.95
40MHz '040 with MMU & FPU. (30 Mips)	*- Only* £199.95
50MHz '060 with MMU & FPU. (39 Mips)	*- Only* £349.95
66MHz '060 with MMU & FPU. (51 Mips)	*- Only* £399.95

A Standard A1200 is rated at 1.3 Mips. All measurements from Sysinfo

***Memory** : 4MB - £18.95; 8MB - £34.95; 16MB - £59.95; 32MB - £129.95*



Interface Island

Where your Amiga does more

A1200/A4000 non-Zorro	
4-device A1200 buffered EIDE i/f	£39.95
4-device EIDE interface for A4000	£29.95
EZ-Key **A1200-PC/A2000 k/b adapt'r**	£39.95
EZ-DF0 **interface for Sony floppy**	£14.95
EZ-DF0 **I/f, with Sony floppy & cable**	£44.95
DiskPlus **DD/HD Amiga & PC 2x FDD i/f**	
- for A1200 hard drive IDE port	£64.95
- for A1200 clock port	£69.95
- for A4000 IDE port	£69.95
PortPlus 2x 460Kbaud ser + 1 x par	£89.95
PortJnr 1x 460Kbaud serial port	£49.95
Audio mixer skts/leads for EZ-Tower	£19.95
Zorro II/III	
ISDN adapter dual channel -128KB	£159.95
GG2+ - use PC cards in Z2 slots	£129.95
IDEPlus 3x2 IDE + 2x DD/HD PC & Amiga floppies. Expandable to10 x IDE dr ives	£79.95

Amiga Drivers for Epson Printers and Scanners



Scanned printed output

EnPrint for the Stylus Range of printers

- Unbelievable photographic quality output
- 'Preferences' & stand-alone printing program

ScanQuix3 for all Epson scanners

- 24 bit scanning with full range of editing options
- 'Scan-to-disk' option in Jpeg or IFF formats
- Stand-alone use or integrates with your Art package (Photogenics, ImageFX, AdPro, XiPaint, Pagestream 3, DPaint5, ArtEffect, PPaint)
- ***Also available for HP, Mustek (Paragon) and Artec scanners***

EnPrint v2.1.3 - only £24.95

ScanQuix v3.0 - only £59.95

Eyetech Group Ltd

The Old Bank, 12 West Green,
Stokesley, N Yorks, TS9 5BB, UK

Tel UK: 07000 4 AMIGA
01642 713 185
Tel Int'l: +44 1642 713 185
Fax: +44 1642 713 634
eyetech@cix.co.uk
www.eyetech.co.uk/~eyetech

Voted AUI Amiga Company of the Year 1996/7

EYETECH

Next Day delivery to EC and USA/Canada. Worldwide deliveries in 2-7 days from receipt of faxed order and payment details. (eg SX32 next day to NYC £25.30)

UK m'land next day insured del'y charges: S/w, cables, buffered i/f £3; 2.5" drives, accel's, mem boards £6; manuals £7; 3.5" drives, modems, psu's £9.50; Twrs, CD+ (2day)£10

Ring/fax/email for other delivery costs

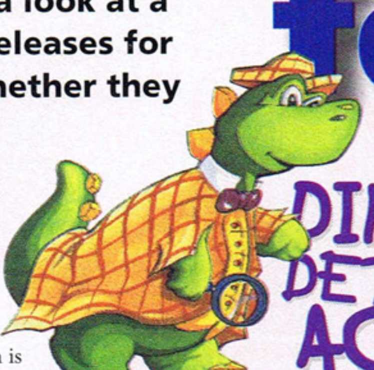
UK bank/building society cheques, Visa*, Mastercard*, Switch, Delta, Connect, Postal/ Money orders accepted. * A 3% surcharge is applicable to all credit card orders.

Due to space limitations some of the specs given are indicitive only - please ring/write for further details. Please check prices, specs and availability before ordering. If ordering by post please include a contact phone no. Goods are not supplied on a trial basis. E&OE.

All prices include VAT at 17.5%.
VAT is not applicable to non-EC orders

Software for kids

David Taylor takes a look at a batch of budget re-releases for children and sees whether they make the grade.



SOOTY PAINT

Creating paint packages for children is a difficult job because the program needs to be easy to use and involving. This package attempts to be both but unfortunately, doesn't quite achieve either. You get a set of uncoloured pictures of Sooty and Sweep and all you have to do is click on a colour and paste it into an area. There are some crude drawing tools, allowing you to edit the pictures or have a go at creating your own, and when you're done, you can print out the kid's efforts. If you make a mistake there is an option to go back or, indeed, erase the whole picture – but this in itself is a problem because the disk has to remain write-enabled and you could end up losing a picture for good.



At the end of the day, unless your kids really love Sooty, this is very poor stuff – and expensive. It would be more worth your while to get in touch with F1 Licenceware, who have some really excellent children's paint packages that cost far less money than this one.

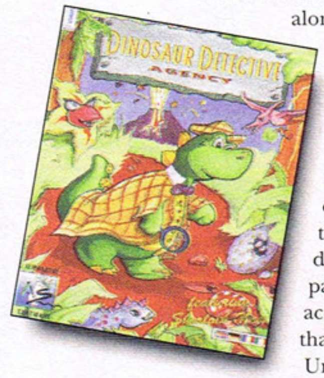
PRICE: £10

OVERALL VERDICT:
It was programmed years ago and I'm afraid it shows. Your kids really have to be Sooty and Sweep freaks.

25%

DINOSAUR DETECTIVE AGENCY

This is a standard platform game that sees you playing the character of the dinosaur Sherlock Ness. The plot, such as it is, requires you to crack four cases by photographing the criminals in the act. You need to collect flash bulbs along the way to use in the camera, which you must be sparing with. Apart from flashing the camera, the only other skill Ness has is the ability to tunnel down through certain parts of levels to get access to others – and that's really about it.



Unlike the other titles in the series, this is not aimed at a specific age group. Sure, there's no violence and the plot has kiddy appeal, but the gameplay involves making some carefully calculated jumps, so small children will lack the necessary co-ordination. Still, judging by the fact that my nephew was quite happy just pressing all the buttons and seeing himself make the sprite move, maybe that's not a problem. Who knows, one day he might even get somewhere!

PRICE: £4.50

OVERALL VERDICT:
Not the most engrossing game and not for the very young. Check out *Kids Rule OK 2*!

70%

KIDS RULE OK

Judging by the price, the compilers know that the contents of this collection are superior to the second series. The *Sooty and Sweep* platform game, aimed at the younger player, is not bad at all – easy to control and heaps of fun. Just run around stunning things and collect the goodies. The downside is that you have to disable the CPU caches and change back to original chip type on the A1200 to play it. *Popeye 2* refused to work on our AGA machines at all.



AMIGA GOLD FORMAT

The third game, *Postman Pat 3,* sees you taking Pat's role delivering parcels American style. Just throw them into the drives of people who need them. Young kids will just drive along and throw parcels to everyone but slightly older children should grasp the game and still maintain an interest.



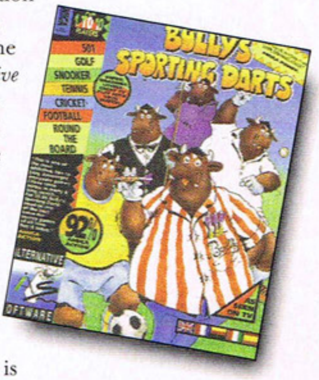
PRICE: £9

OVERALL VERDICT:
A reasonable set of games for a great price.

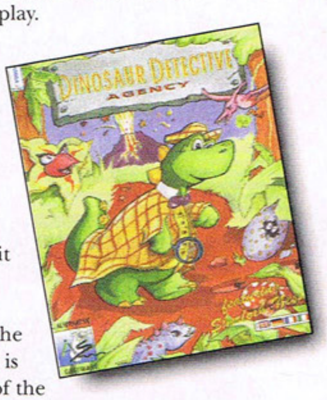
90%



KIDS RULE OK 2



This is a collection of three games and includes the *Dinosaur Detective Agency* which is also being sold separately. The other two games in the package are *Bully's Sporting Darts* and *Wrestle Crazy*. The first, unsurprisingly, is based on the TV programme Bullseye and stars Bully the fat bull. All the popular darts games are included and for some reason they are really addictive. All you have to do is try and get the hand reasonably steady, then work out how far up from the point the dart will land and away you go but I spent hours playing, trying to beat the computer and anyone else I could convince to play.



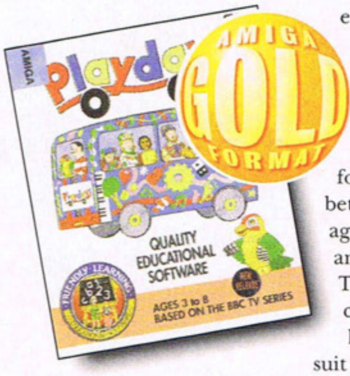
Wrestle Crazy stars my least favourite cartoon character – Popeye. I won't hold that against it but what I will hold against it is the fact that this is clearly one of the worst games ever created. The game is designed for either one or two players and consists of Popeye wrestling aliens. The moves are poor, the animation is dreadful and the controls suck. In fact, all that's worth doing is waggling the joystick and pressing the fire button wildly.

PRICE: £5.50

OVERALL VERDICT:
Two reasonable games and two spare disks you can format for just over £5 – can't be bad!

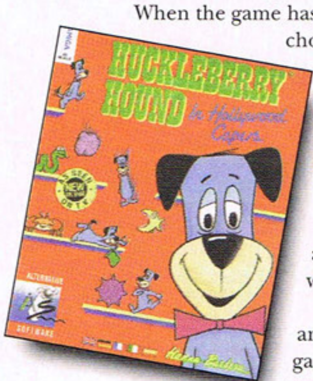
85%

PLAY-DAYS



This is an educational title featuring ten games designed for children between the ages of three and eight. There is a choice of levels to suit the wide age range and the program works best with some parental guidance.

When the game has loaded choose a letter. You are then shown a set of words starting with that letter and some associated words.



There are counting games, a snap game and a game where you have to match the picture to the word. *Odd One Out* asks you to select which picture or word does not suit.



Each game is supposed to help the child in word recognition, spelling and co-ordination,. The whole package is one of the better titles here and should certainly be of benefit to kids.



PRICE: £9

OVERALL VERDICT:
One of the better titles, reflected in the higher price but well worth the money.

90%

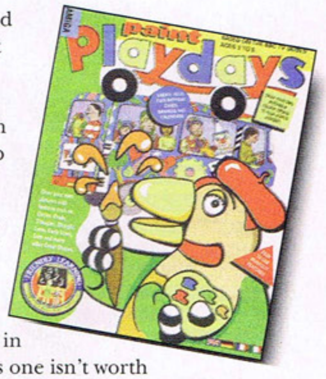
CONTACT DETAILS

All the games featured here can be ordered from Epic Marketing on 0500 131486. Unfortunately you have to order two games at once, but judging by the budget prices that shouldn't be too much of a problem. It is also worth noting that if you order goods to the value of, or more than, £20 you get a free CD. Well there you go - if you've got young kids at home then you can't afford to say no!

(Please note that none of the prices mentioned here include postage and packing).

PLAY-DAYS PAINT

This is the same executable used in the *Sooty Paint* program – in fact the only difference is the set of pictures included. When you see the first picture load up, you'll see exactly what you've got: a rubbish picture of a house that even I, with my limited artistic ability, could have managed. There are some music modules from the "Playdays" TV programme and a parrot, that kids will recognise from the TV, to colour in.



This is a tacky old *AMOS* program that is badly launched and certainly not worth £10. When the splash screen that loads up is, sadly, the best thing you can find to say about a package, then you know you're in trouble. This one isn't worth your time or money. AF

PRICE: £10

OVERALL VERDICT:
Avoid. We repeat: avoid. If you're flush enough to waste the money, send it to us instead.

20%


THIS MONTH IN the internet magazine .net
PUMP UP THE VOLUME
Tune into the future of Net music
CD-ROM includes the Cerberus Digital Jukebox featuring tracks from Goldie, Coldcut, DJ Freedom and Fila Brazillia
Play X-Wing vs TIE Fighter over the Net
the internet magazine .net
MADE TO MEASURE
AND THEN...
Find out how personal information services can tailor the Net for you
Create the perfect Web page with our expert advice
Discover how high-tech hackers get their own back
The .net guide to GETTING STARTED
16 pages of expert advice for Net newcomers
Issue 35 on sale Thursday 24 July
£3.95 with CD-ROM
£2.95 without
http://www.netmag.co.uk/

A Tower Amiga



Only a lad, yet he's already written several scripts for *AmIRC*...

In the first of this month's long term reviews, Gareth Murfin explains why *you* should fit your A1200 into a tower.

Before fitting my A1200 into a tower I used to regularly straighten and tidy the masses of wires which lead from the back of my Amiga. Everything I bought was external because I thought that was all the A1200 could handle.

Before long my A1200 was sitting in the middle of a desk with thousands of wires tangled around it. Each wire lead to a different external device, my modem, CD-ROM drive, external floppy drive, bulky 3.5" hard drive, huge 230 Watt Atom PSU and various fans to stop the whole thing spontaneously combusting. Then, when I bought an Apollo 1240, I was shocked to see on the instructions 'you will need an A1200T to fit the optional SCSI board'. I thought to myself 'an A1200T, what the hell is that?'

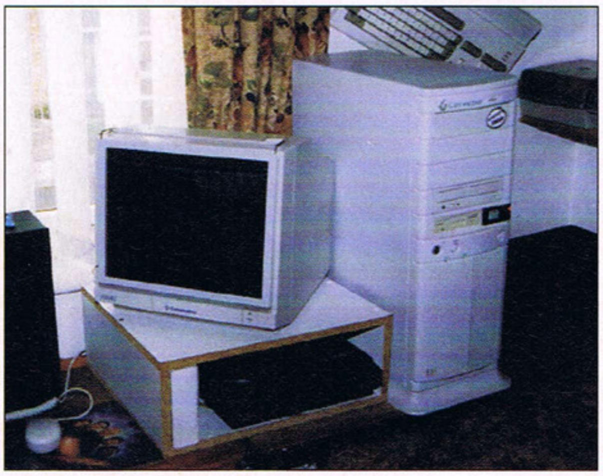
A1200T WHAT?

After quizzing various experts I discovered what an A1200T was and the advantages and disadvantages of owning one. That week my DIY tower conversion began.

"I was shocked to see it was almost perfect for putting all my external devices in."

The first thing I bought was a full sized tower from a PC owning friend. Ironically it was a Gateway 2000 tower and after seeing it I had already decided to call my Amiga an A1200Tg (the 'g' stood for Gateway). I opened the tower and was shocked to see that it was almost perfect for putting all my external devices in! I quickly installed my PSU, hard drive and CD-ROM into the tower and still had acres of room left inside.

I began to think of ways to put my A1200 motherboard into the tower without rendering the PCMCIA slot useless. It was my father who came up with the award winning idea to put the mother board in horizontally so that the PCMCIA slot was at the back of the tower like an ordinary port. I quickly got some wooden blocks made to mount the motherboard and then put the idea into action. It worked! I even had enough space to slot my lovely Apollo 1240 in (and the bottom of my A1200 would never bulge again because of the huge fan pressing on it all the time!).



Neatly hidden away in the tower, Gaz Murfin's machine is an inspiration to us all.



Gareth's Gateway case was just a coincidence – or was it a sign?

After buying the appropriate adaptors and interfaces I was able to fit a very sleek Windows 95 keyboard to my A1200Tg. I then cut a few slots into the tower and mounted the original 1200 LEDs in the case and plastered Amiga logos next to the Gateway 2000 ones which were already there. (I had to remove several annoying 'Intel inside' stickers and replace them with '68040 inside' ones instead!).

BAITED BREATH

I arranged my new tower on the desk next to my trusty Commodore 1084s monitor and waited with baited breath for the arrival of my 16Mb SIMM. A few days later it arrived and I slotted it in with a satisfying clicking noise and bolted the shell back onto my oversized tower. Workbench booted up in record time and my toolbar read 16,450,768 bytes of 'other mem'.

After a few speed tests on *Sysinfo* and *AIBB* my face was filled with glee as I found out that my new A1200Tg, fitted with an 040/25MHz and 18Mb, RAM was nearly as powerful as the A4000 (the machine all A1200 owners lust after). I loaded various programs and commented to my father on how fast they were and then decided to put it to the ultimate test, *Gloom Deluxe*.

I clicked on its tiny icon and and in a matter of seconds was blasted with the premature tune that is *Gloom*'s theme music. Armed with my trusty CD^{32} pad, I entered the Gothic Tomb and was overwhelmed with the breakneck velocity at which the game played even on 256 colours at pixel size 1*1.

INANE GRINNING

I paused the game and stood back from my computer grinning inanely. I own an A1200Tg I thought, a setup even Pentium owners could be jealous of, and I created it all, just me with my Phillips screw driver, DIY inclined mind and the unbelievable resourcefulness that is lurking within all Amiga enthusiasts.

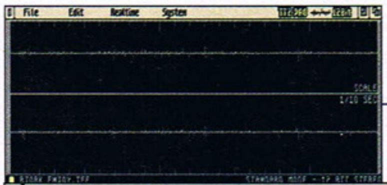
Technosound Turbo 2 Pro



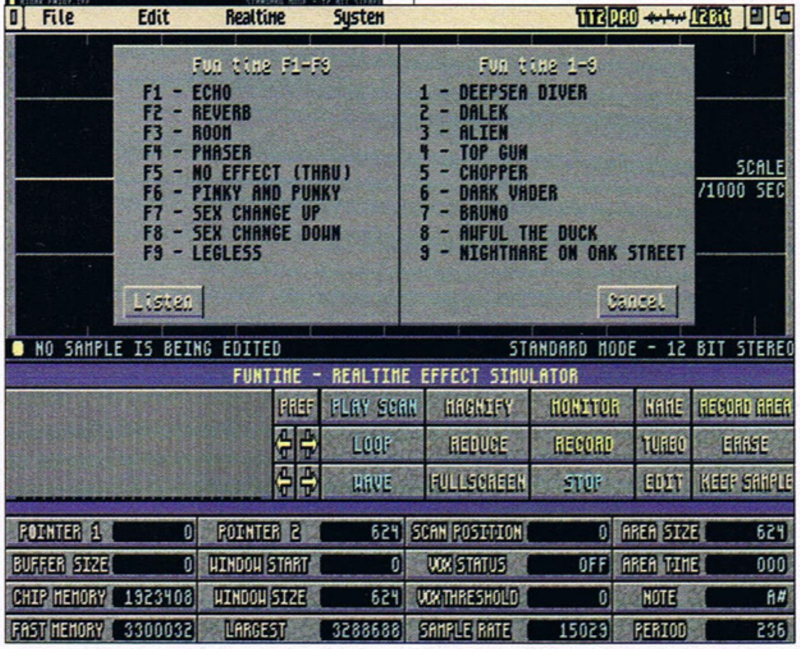
Jonathan Duke

We want to see more reviews written by you. Tell us what you think about *Final Writer*, *Personal Paint*, *PageStream*, *CanDO* or *Imagine*, and we'll print it for everyone to see. Remember we would also like a photo of yourself and if you have something you've created with the software, or a photo of your hardware set up, send that along too!

This is probably the most popular sampling package ever on the Amiga. At one time, it had no equal. But, slowly, other sampling packages began to redress the balance. Not so long ago, the package was re-issued in a Pro version, with the option of a 12-bit sampler to go alongside the standard 8-bit one. However, now, it is no longer possible to upgrade to the 12-bit hardware, as, at least in my version, the relevant forms are not included.



Technosound Turbo 2 (or *TT2* to its friends) is great as a low-cost way of introducing samples to your Amiga.



Not only is *Technosound Turbo 2* a really great sampler, and probably the most popular, it can also be used for real-time effects such as distorting music or voices. Wacky!

Why this is I do not know, but I assume is is to do with the manufacturer, New Dimensions, going out of business or deserting the Amiga. This means that it is just the 8-bit sampler of old on test here, meaning that the "Pro" is all but meaningless.

Right, now we've got that rather long-winded explanation out of the way, perhaps we can get on with reviewing the product. It is still the good old sampler that so many knew and loved years ago. I was very surprised on purchasing the product the sound quality achived. Recording off of CDs gives a superb quality, and all samples can be saved in raw or IFF format, for use in trackers or in games such as *Worms*. Of course, the quality of the samples very much depends on your set-up and on the sound source you are using.

Samples are known to eat up RAM like male-sheep eating dragons, so make sure you have plenty to take decent samples at the higher frequencies (20-28kHz). In my 6Mb, everything seemed OK, although I have not attempted to sample entire songs or anything crazy like that. If you do, be careful, as the chip RAM used to store most samples is limited to just 2Mb on any Amiga.

The software is also very nice. It is fast and intuitive, and allows easy manipulation of sounds without too much hassle. There are all sorts of weird effects to be added to the samples you take, and I'm sure there will be something, useful or otherwise, for everyone to experiment with.

The built in tracker can also come in handy for trying out your ideas, although be warned, it does not use the standard MOD format, and you would be well-advised to track down a decent PD tracker like *Pro-tracker* or maybe a commercial alternative, such as *OctaMED*.

When you consider the lack of samplers, 8-bit or otherwise, available for the Amiga at the moment, you have to say that this is a very nice product. It produces excellent quality, has some great software, and the vaule for money is tremendous. Whether it's worth saving up for the Aura or not is up to you, but this is a very acceptable alternative.

BEN SAYS

As an aid to copyright theft sound samplers are probably the biggest boon ever, and perhaps that contributes to their popularity. As Jon mentions, it is odd that there are very few new sound samplers available at the moment, although the new retargetable sound cards starting to appear will no doubt have greatly improved 16-bit multi channel sampling capabilities.

AMIGA FORMAT GOLD

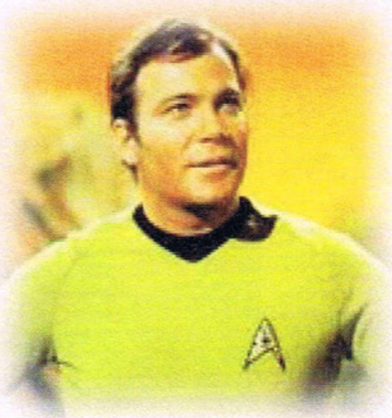
DISTRIBUTOR: First Computer Centre
0113 231 9444
PRICE: £29.99

OVERALL VERDICT:
An easy-to-use and flexible package – brilliant value.

90%


NEW VIPER MKV 1230 0MB £139.95
NEW VIPER 1230 INC. 8MB £179.95
WORDWORTH £10 WITH THIS BOARD OFFICE 6 CD-ROM
INCLUDES SCSI INTERFACE
POWER
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CE APPROVED
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FPU'S WHEN PURCHASED WITH ANY ACCELERATOR BOARD
20MHZ £10 (PLCC ONLY)
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VIPER MKV FOR THE AMIGA 1200
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SUPPORT UPTO 256MB OF RAM
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THE POWER VIPER & CD BUNDLES INCLUDE:
• VIPER 1230 50MHZ 68030 ACCELERATOR
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• 8MB RAM INCLUDED
• EXTERNAL SCSI CD-ROM DRIVE
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• CHAOS ENGINE CD-ROM
• WORDSWORTH OFFICE 6 CD-ROM
BUNDLE WITH x2 CD £239.95
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40 MHZ
A600 4MB 40MHZ £115.95
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4MB OR 8MB ON-BOARD (NOT UPGRADABLE)
NEW VIPER MKIV 42MHZ 4MB £89.95
FREE BREATHLESS
FOR THE A1200
VIPER MKIV 68030 42MHZ
4MB OF RAM ONLY (NOT UPGRADABLE)
FREE BREATHLESS
A1200 4MB RAM CARD £49.95
4MB ONLY (NOT UPGRADABLE)
THE BIG RED ADVENTURE
86% AMIGA FORMAT
AMIGA SUPERSTAR
ONLY £19.95 CD-ROM ONLY
AMIGA 3.1 OPERATING SYSTEM
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A500/2000 3.1 ROM £59.95
A4000 3.1 ROM £69.95
AMIGA 3.1 OS INCLUDES ROM CHIP, SOFTWARE AND MANUALS
Visit our NEW web site www.powerc.demon.co.uk
01234 851500
UNIT 82A SINGER WAY KEMPSTON MK42 7PU
FAX 01234 855400

Powering Inferno



Is your power supply tense, nervous and tired? Is it feeling the strain? Nick Veitch prescribes some remedial action.

Don't you wish you were Captain Kirk? Whenever the Enterprise was being chased by Klingons or being sucked into some space anomaly he just used to get on the blower to Scottie and demand more power. Scottie would whine for a bit and then eventually come up with the goods, just in time to save the ship/planet/galaxy.

With the Amiga it isn't so straightforward. If you have recently added a new hard drive, a new accelerator/RAM card or any other peripheral and now experience the odd, unexplained system crash or drive failure, power could be the problem. The original power "brick" for the Amiga delivered about 40 Watts, and later versions (for the more energy efficient A1200) around 25-30W. This was perfectly adequate for the Amiga itself, but once you start adding things to it, that power is quickly soaked up. Accelerator cards are probably the most common power drain on systems – faster processors, particularly '040s, are going to use many multiples of power more than your surface mount 68020, and there's all that RAM and perhaps a SCSI port too.

"If you do have a problem you'll want a chunkier PSU."

IT ALL ADDS UP

Samplers, frame grabbers, Squirrels, floppy drives – it all adds up. The easiest way to check if you have PSU problems is to remove something simple (like an extra floppy drive) and see if the unexplained system crashes continue to happen. If they don't it could well be that your brick has been overtaken by your Amiga expansions. We certainly don't advocate you taking apart your Amiga and fiddling around with a multimeter, it's dangerous – to your Amiga as well as yourself.

If you do have a problem, you'll want a chunkier PSU, and nowadays there are a few to choose from. They are usually power supply units that were

Wizard Power Box



This is the most powerful of the units, with 240-250W of power available for your computing needs.

The unit itself is small and square, roughly twice the size of your current brick, but about the same height. There are plenty of connections on the front panel – three standard four-line connectors for drives, two floppy connectors, and even a power light connector. The Amiga connector is of course, the standard square plug on a good length (about 1m) of sturdy cable.

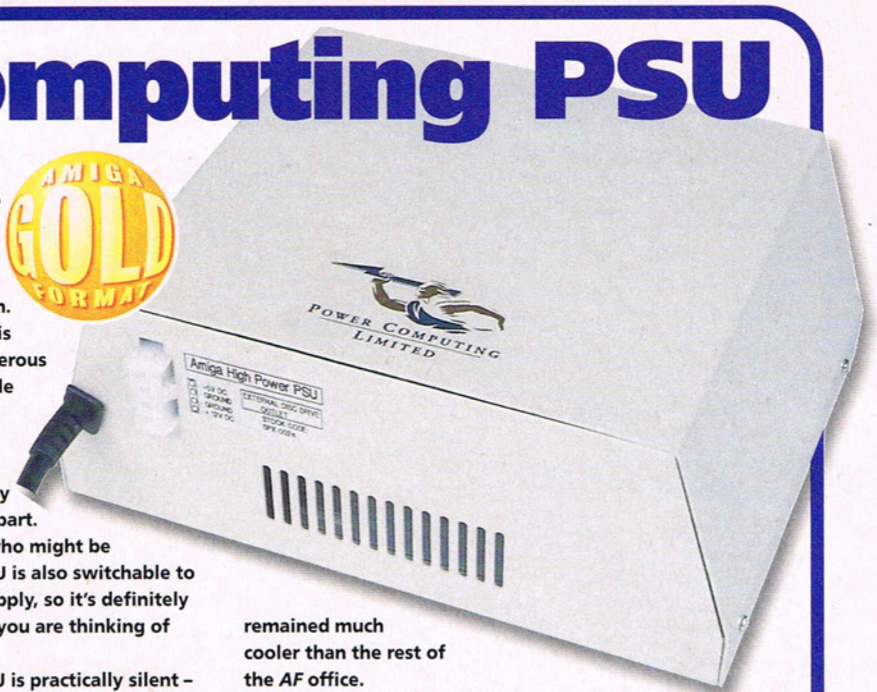
The extra connections make the unit more attractive to those who may be thinking that they will buy a tower case in the near future. That said, it does mean that you will have a messy bundle of wires hanging out the back of the box, which isn't ideal – you could of course open the case and stuff the wires back inside, but I suspect this would invalidate your warranty. As with the other two units reviewed here, the power supply also has a pass through which is jolly handy for a monitor connection. Overall, a solid and dependable unit, at a very attractive price.

DISTRIBUTOR: Wizard 0181 303 1800
PRICE: £49.99

OVERALL VERDICT:
Excellent value.

92%

Power Computing PSU



The Power PSU is a stylish unit, as you might expect. The sloping sides are rather reminiscent of the Prima Atom supply, but the build quality and cosmetics are much better. It certainly is the nicest looking of the alternative power supplies, even if it is just a tiny bit bigger.

A standard four-line power socket at the back allows the connection of a hard drive power cable directly to the unit – useful if you have an external IDE drive, and as just the socket is fixed into the rear of the case, it isn't as obtrusive as the Power Box solution. The Amiga supply is delivered by a generous meter of black cable which is securely mounted to the PSU, reducing risks of accidentally tugging the unit apart. For those of you who might be interested, this PSU is also switchable to work on a 110v supply, so it's definitely the right choice if you are thinking of emigrating.

In use, this PSU is practically silent – initially we weren't sure if it was working, but in actual fact it just has some sort of "stealth mode" fan attached. You would wonder whether such a quiet fan is actually doing its job, but in extended use the Power unit remained much cooler than the rest of the *AF* office.

If you are worried about approval other than *Amiga Format*'s, you'll be pleased to know that Power's unit is not only CE approved, but carries an array of approval certificates from various standards bodies.

This is the most expensive of the units on test, but is also the Rolls Royce of the models available.

DISTRIBUTOR: Power Computing 01234 851500 PRICE: £69.95

OVERALL VERDICT:
Silent, but powerful.

92%

designed to end up in some PC tower somewhere, so there is no fear that you are going to be able to overload them on an A1200, even if you have accelerators, extra RAM, floppy drives, Squirrels, printers, modems and all sorts hanging off it.

MORE THAN ENOUGH

To give you some idea, the average IDE hard drive demands around 4 Watts of power (a lot less for newer models, more for very old ones), and most replacement units are capable of delivering up to 200W.

SO HOW DO THEY COMPARE?

	POWER PSU	WIZARD POWER BOX	PRIMA ATOM
Rating (Watts)	200	250	200
Four wire connector?	✔	3	✘
Floppy connector?	✘	2	✘
Power through connector?	✔	✔	✔
Power light?	✘	✔	✘
CE approved?	✔	✘	✘

Prima Atom



This unit was originally reviewed in *AF95* where it scored a commendable 90%. Since then, it has undergone a price reduction, but has also been overtaken in terms of features.

This unit is fairly standard. It supplies 200W through a length of black cable ending in the standard square plug. Design-wise the PSU is housed in a fairly attractive box, similar to the Power Computing PSU. Very similar actually.

Internally though, the PSU is not switchable and there is no provision for the standard four line power out which would be useful for external drives. As with the other drives there is a monitor power through socket.

The Prima Atom is reasonably quiet in operation and doesn't get too hot.

DISTRIBUTOR: First Computer Centre 0113 231 9444 PRICE: £59.95

OVERALL VERDICT:
Generally does the job well.

NEW... POWER UP

AMIGA™ GOES POWERPC™

POWER UP YOUR AMIGA...

*A further dimension is being added to Amigas with our new PowerPC based **BLIZZARD POWER BOARDS** for A1200, A1200 based Tower Systems and A1500/2000 systems along with the new **CYBERSTORM PPC** for A3000/4000 systems. You'll now be able to benefit from performance many times beyond the speed of the fastest 680x0 based boards.*

Designed as upgrades for existing systems, **Power Boards** incorporate innovative dual processor technology where a fast PowerPC RISC processor is combined with a 68k CPU, dynamically sharing memory and system busses.

While the original AmigaOS 3.x continues to run on the 68K CPU, supporting existing applications to provide backward compatibility, the PowerPC CPU is backed by comprehensive PPC Libraries which provide the functionality to integrate PowerPC into an Amiga multitasking environment.

Software developers can easily optimise their programs, step by step, porting single tasks to PowerPC code, which then run in parallel with 68k tasks. Leading Amiga software vendors are preparing ported or optimised versions of their software packages already. It is anticipated that a large quantity of software products supporting the PowerPC will be available soon.

Power Boards will be delivered with a comprehensive suite of utilities, including the PPC library, as well as tools for creative users. Among them is a Public Domain GNU C compiler for PowerPC (including sourcecode), many demo programs and utilities with sourcecode. In addition to this software, free developer support is available via FTP site.

Last but not least, a PowerPC optimised version of CyberGraphX V3 with RISC optimised CyberGL/3D plus MPEG functions and libraries is included (along with a special GGX driver to support the AGA chipset) with full and comprehensive documentation.

	Blizzard 603e PowerBoard	Blizzard 603e+ PowerBoard	Blizzard 2604 PowerBoard	Cyberstorm PPC
PowerPC CPU	603e	603e	604e	604e
Clock Speed	175MHz	200MHz	150-200MHz	150-200MHz
Companion CPU	68030 50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz	68040/68060 25-50MHz
Est. PPC Performance	@ 175MHz	@ 200MHz	@ 200MHz	@ 200MHz
MIPS	Approx. 250*	Approx. 280*	Approx. 350*	Approx. 350*
SpecFP95	Approx. 3.1	Approx. 3.5	Approx. 7.1	Approx. 7.1
Memory Option	Max. 64Mb	Max. 64Mb	Max. 128Mb	Max. 128Mb
SIMM Sockets	1	1	4	4
SCSI On Board	Fast SCSI-II	Fast SCSI-II	Ultra Wide	Ultra Wide
Amiga Compatibility	A1200(+T)	A1200(+T)	A1500/2000	A3000/4000(+T)
Est. Availability	Summer '97	Summer '97	Summer '97	Summer '97

Blizzard 603e Power Board - A1200(+T)

The new Blizzard 603e Power Board is an inexpensive Power Up Accelerator for A1200 system owners who already have a board with a socketed full 50MHz 68030+MMU processor (these CPUs have a gold finish to the top surface) eg.50MHz Blizzard 1230-II, III, IV or similar. Featuring a 175MHz PowerPC 603e RISC CPU, the board has a socket for the 50MHz 68030, expansion capabilities of up to 64Mb high speed memory and built in SCSI-II controller.

Imagine the performance from your A1200 with this low cost board!

Blizzard 603e+ Power Board - A1200(+T)

The Blizzard 603e+ Power Board is the highest spec Power Up Accelerator for A1200 systems. Featuring a 200MHz PowerPC 603e RISC CPU, the board has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 64Mb of high speed memory and built in SCSI-II controller. This board is ideally suited to those owners who already use an accelerator with either a 68040 or 68060 CPU (ie. Blizzard 1240T/ERC or Blizzard 1260 owners or their equivalents)

If you want the BEST from YOUR Amiga A1200 - this is it!

Blizzard 2604 Power Board - A1500/2000

If you own either an A1500 or A2000 you can now take advantage of PowerPC technology with this 604e CPU RISC based board which has a socket for a companion 68040 or 68060 CPU, expansion capabilities up to 128Mb of high speed 64-Bit memory, built in Ultra-Wide SCSI controller and a high performance expansion slot for expansions such as the CyberVision PPC. This board is ideal for owners of accelerators with 68040 or 68060 processors such as the Blizzard 2040 or Blizzard 2060 owners (or their equivalents).

Want the BEST from YOUR Amiga A1500/2000? - Look no further!

CyberStorm PPC Board - A3000/4000(+T)

CyberStorm PPC is the ultimate accelerator for Amiga 3000[T], 4000[T] and systems with compatible CPU slots, offer blistering 604e performance - more than 10 times faster than any 68k based accelerator on sale today! Available with clock speeds of 150, 180 and 200MHz, the companion socket for the 68k processor accepts either a 68040 or 68060 CPU. The board provides 64-bit wide extremely fast memory expansion using pairs of standard SIMMs, dynamically shared by the two CPUs. Additionally, CyberStorm PPC comes with a DMA driven Wide ULTRA SCSI controller on board offering transfer rates of up to 40Mb/sec for even the most demanding of professional applications. A 32Bit high speed expansion connector, with DMA access to the main memory, is also provided for later upgradeability.

The 200MHz version of the CyberStorm PPC provides performance of more than 350 MIPS or approximately 8.1 SPECint95 and 7.1 SPECfp95*... breathtaking speed that goes far beyond that offered by most PC systems. In the second half of the year, an advanced graphics board will become available for the CyberStorm PPC expansion slot, providing a subset of the innovative CAIPIRINHA custom chip. By having a stand alone version of the DLRP (Display List Risc Processor), this board will offer superior display capabilities through higher VRAM-based resolutions, pixel depths and speeds, as well as the potential to begin developing software supporting the functionality of the forthcoming A\BOX system.

PRICING AND AVAILABILITY:

Options with or without 68k CPUs will allow users to fit the CPU from their existing accelerator. Delivery of Power Boards is scheduled for Summer 1997 following finalisation of CE approvals. Call now for full details.

Special prices available to existing BLIZZARD & CYBERSTORM board users

Blizzard 603e/603e+ Board...	175MHz	200MHz
with Empty 030 Socket	£289.95	
with Empty 040/060 Socket		£379.95
with 68030/50MHz fitted	£329.95	
with 68040/25MHz fitted		£429.95
with 68040/40MHz fitted		£459.95
with 68060/50MHz fitted		£614.95

POWER PC TECHNOLOGY, POWER PC SPEED and POWER PC PERFORMANCE

Cyberstorm PPC 604e Board...	150MHz	180MHz	200MHz
with No Processor	£479.95	£549.95	£629.95
with 68040/25MHz fitted	£519.95	£579.95	£669.95
with 68040/40MHz fitted	£549.95	£609.95	£699.95
with 68060/50MHz fitted	£709.95	£769.95	£859.95

**Quoted performance figures are estimations based on specifications from Motorola/IBM and are relevant to the PowerPC processor only. Prices Include VAT @ 17.5%. Owners of other makes of board or those who don't already have an appropriate CPU - please call for prices.*

Harwoods... always the Fastest Amiga Boards and NOW PowerPC Technology for Amigas too!



CHECK OUT... NEW LOWER PRICES ACROSS THE RANGE OF BLIZZARD AND CYBER PRODUCTS!

CYBER BLIZZARD SPEED

STILL THE **FASTEST**, NOW **LOWER PRICED**, NO ONE ELSE COMES CLOSE!

CYBERVISION 64/3D

64-Bit ENGINE A2000/3000/4000 (T Series) 3D VERSION 24-Bit COLOUR ACCELERATED GRAPHICS CARD.

For all Zorro-3 and Tower System A1200s with Zorro II backplanes.

LOWER PRICES!

The core of this great board is the VIRGE GRAPHICS CHIP from S3. With 3D capabilities, it's able to process complex 3D functions in hardware (eg. shaded & textured surfaces) with Trilinear Filtering and Shading/Fogging for super realistic Real Time 3D Rendering. When used with CyberGraphX 3D library, Cybervision 64/3D can even offer a broad range of 3D facilities for any software developer.

CyberVISION 64/3D... 4Mb Version — £169.95

MPEG Decoder - added to the Feature Connector to provide real time MPEG audio and video decoding at full size custom screens or, in Workbench windows (HQ display using 16/24Bit modes from CyberGraphX Workbench). Stereo audio output is provided via the supplied dedicated line output jack. Upgrade to a Cybervision 64/3D and MPEG bundle (from previous Cybervision 64) for a special low price! — £149.95

Monitor Switcher - with integrated scan line doubler. Designed to fit into the Amiga slot, this gives full automatic switchover from the standard Amiga signal to Cybervision 64/3D's output. Both cards may be fitted inside A3000/4000 models leaving three Zorro-III slots free. — £79.95

CYBERSTORM II

CAN BE EXPANDED TO A FULL 68060

AMIGA 68040ERC AND 68060 ACCELERATORS

You can choose between the 68040/40ERC Cyberstorm II or the ultra powerful 68060 version. When you fit a Cyberstorm II 68060 Accelerator to YOUR A3000, A3000T, A4000 or A4000T you can for example, render a graphic with Imagine 2.0 software in just 2.4 minutes! Compare that with 10.34 minutes on a standard A4000 '040/25! With no jumpers, both Cyberstorm II models are fully plug and play and, A4000 users even have the option of a SCSI-2 Module if they wish (A3000s already have SCSI built in).

- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Optional SCSI-2 Module
- If your budget currently only covers the cost of Cyberstorm II 68040ERC, you can always upgrade later to the full 68060 processor for the extra power!

LOWER PRICES!

Cyberstorm II 68040/40 40MHz 68040ERC - 0Mb, Expandable to 128Mb — £299.95
Cyberstorm II 68060/50 50MHz 68060 - 0Mb, Expandable to 128Mb — £449.95
Cyberstorm II SCSI-2 Module — £79.95
Cyberstorm II SIMM RAM Expansions (Please call for a range of SIMM prices) — £Call

1240T/ERC TURBO ACCELERATOR MEMORY BOARD

A1200T* TURBO ACCELERATOR and MMU/FPU for *TOWER SYSTEMS
40MHz 68040 - 0Mb Standard, expandable to 128/256Mb
30MIPS with 60 Nanosecond SIMM fitted.

CAN BE EXPANDED TO A FULL 68060

A super LOW COST A1200 Turbo Accelerator Board, ideal for housing on any *Tower System A1200 main board (mechanical dimensions, high power consumption and heat emission require an active cooling cap, we therefore do NOT recommend fitting to standard A1200s without the appropriate modifications etc.). The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - an excellent guaranteed and competitively priced alternative. Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

LOWER PRICE!

Blizzard 1240T/ERC Turbo 40MHz 68040 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb — £199.95

2040ERC TURBO ACCELERATOR MEMORY BOARD

A1500/2000 TURBO ACCELERATOR and MMU/FPU
40MHz 68040 - 0Mb Standard, expandable to 128Mb
30MIPS with 60 Nanosecond SIMM fitted.

The Blizzard 2040ERC is a super LOW COST board which offers A1500/2000 owners the opportunity to upgrade to the same performance as the Blizzard 1240T/ERC Board. Users will then be able to enjoy full A4000/040 power as well as take advantage of the built in SCSI-2 interface. The "ERC" Processors used on these boards are recycled and vigorously tested 68040 CPUs operating at 40MHz with MMU/FPU - excellent guaranteed competitively priced alternative.

CAN BE EXPANDED TO A FULL 68060

Blizzard 2040ERC Turbo
40MHz 68040 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 128Mb — £299.95

LOWER PRICE!

1260 TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

A1200 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 64/192Mb
38.71MIPS with single sided 60/70 Nanosecond SIMM fitted.

Offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot. Your A1200 will then operate at TWICE or even THREE TIMES THE SPEED of an '040 based upgrade and up to FIVE TIMES THE SPEED of a standard A4000! Available options such as the SCSI-IV Kit and RAM are shared with the Blizzard 1230-IV and 1260.

Blizzard 1260 Turbo 50MHz 68060 and MMU/FPU, 0Mb 32Bit Fast RAM, exp. to 64/192Mb — £349.95

LOWER PRICE!

2060 TURBO ACCELERATOR MEMORY BOARD

A1500/2000 TURBO ACCELERATOR and MMU/FPU
50MHz 68060 - 0Mb Standard, expandable to 128Mb
38.71MIPS with 60/70 Nanosecond SIMM fitted.

Offers Amiga A1500/2000 owners the same specification as the remarkable Blizzard 1260 Turbo (A1500/2000s will operate at up to FIVE TIMES THE SPEED of a standard A4000) with FULL 68060 POWER and also includes built in SCSI-2 interface!

Blizzard 2060 Turbo
50MHz 68060 and MMU/FPU with SCSI-2, 0Mb 32Bit Fast RAM, exp to 128Mb — £499.95

LOWER PRICE!

1230-IV TURBO ACCELERATOR MEMORY BOARD

EASY TRAPDOOR INSTALLATION... No modification necessary. Reliable low heat output.

A1200 TURBO ACCELERATOR and MMU
50MHz 68030 - 0Mb Standard, expandable to 128/256Mb
9.91MIPS with 60 Nanosecond SIMM fitted.

The highest performing 68030 Accelerator available for your A1200. With its 50MHz 68030 and MMU, the 1230-IV offers BETTER PERFORMANCE at a LOWER PRICE. With a SysInfo rating of 9.91 (using a 60 n/s SIMM) you can see the 1230-IV is very fast... a performance gain of up to 500% is achieved! Via its Fast Expansion Bus, an optional SCSI-2 Controller module can easily be fitted. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32Bit Fast RAM (up to 256Mb with the SCSI-2 option using its extra SIMM socket).

LOWER PRICES!

Blizzard 1230-IV Turbo 50MHz 68030 and MMU, 0Mb 32Bit Fast RAM, exp. to 128/256Mb — £99.95
Fast 60 Nanosecond SIMM RAM Expansions - 32Bit, 72Pin — £Call
Motorola Maths Co-Processor - 68882 PGA type FPU, 50MHz — £49.95

MOTOROLA MOTIVATED

Blizzard and Cyberstorm products use MOTOROLA 680X0 and PowerPC series processors. They run **WITHIN** the electrical timing specification laid down by Motorola to prevent any possible overheating/reliability problems. So, when you pay for a 50MHz CPU for example, that's exactly what you get... not a 40, 33 or even a 25MHz CPU "clocked" to 50MHz! Look out for the **MOTOROLA MOTIVATED** logo - your guarantee of our commitment to quality and reliability - **BEWARE** of "clocked" CPUs! T/ERC and ERC processors used on selected boards are recycled and vigorously tested 68040 CPUs operating at 40MHz - an excellent guaranteed and competitively priced alternative.

BLIZZARD SCSI-IV KIT

SCSI-2 MODULE for 1230-IV, 1240T/ERC & 1260, & ADDITIONAL 128Mb SIMM SOCKET
(Fast SCSI-2 DMA Controller - upto 10Mb/s transfer rates with additional SIMM socket/extra RAM)

Blizzard SCSI-IV Kit — £79.95

What the Magazines think...

Blizzard products have consistently achieved the highest magazine accolades and awards!

Amiga Shopper *"...1260 is destined to become the ultimate object of desire for A1200 owners."* - 91% STAR BUY Award
Amiga Computing *"...If you want the fastest Amiga in the World, get this board"* - 92% BLUE CHIP Rating
Amiga Format *"...Ride on the fastest A1200 in the World..."* - 95% GOLD Rating

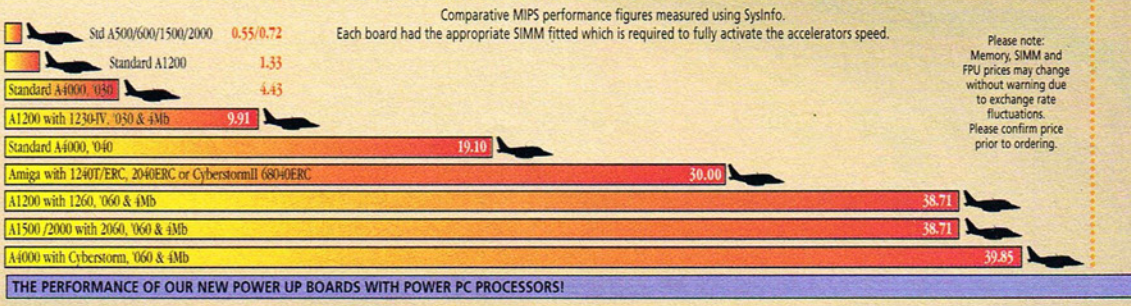
OUR RANGE HAS WON MORE AWARDS THAN ANY OTHER

1230-IV, 1240T/ERC and 1260 FEATURES

- May be disabled with simple keystroke on boot up - for full games compatibility, even badly programmed/older software
- Battery backed self re-charge Real Time Clock
- High performance expansion with full 32Bit wide DMA
- Easy trapdoor installation - no modifications required (1240T/ERC fits in Tower)
- 1230-IV features PGA FPU socket allowing optional 50MHz 68882 FPU

JUST COMPARE THE PERFORMANCE FIGURES FOR YOURSELF!

Comparative MIPS performance figures measured using SysInfo.
Each board had the appropriate SIMM fitted which is required to fully activate the accelerators speed.



Please note: Memory, SIMM and FPU prices may change without warning due to exchange rate fluctuations. Please confirm price prior to ordering.

Are you wanting to connect to the Internet?

1. Comprehensive Software

ALL YOU NEED TO CONNECT AND SURF THE INTERNET

NetConnect provides you will all you need to connect to the Internet - full TCP stack, web browser, mail, news, ftp, irc and telnet clients. You don't need anything else, no need to worry about additional software. The CD version even includes pre-configured MIME-types for web browsing), datatypes, additional online documentation and more!



2. Commercially Licensed

NO SHAREWARE - FULLY LICENSED SOFTWARE

NetConnect is a suite if **commercially licensed** Internet software which means there is no need to register any of the core modules contained within the package - no time limitations, no hassle. All the software contained within NetConnect are arguably the best in their class. Net Connect controls the modules with a unique floating (or fixed) icon bar (which can be altered and new icons added to the bar) which means everything is just one click away!

NetConnect is, of course, fully supported and the modules contained within Net Connect will be supported by the authors with minor upgrades, enhancements or bug fixes.

3. After Sales Support

THE BEST FREE SUPPORT - GUARANTEED

We pride ourselves in offering superb after sales support to all our NetConnect/Internet users. We guarantee you will not get better **free** Internet related support from any other rival company. Support via telephone (Mon-Fri 10am-6pm), e-mail, mailing list (general NetConnect forum) and the web site (www.amigaworld.com/netconnect).

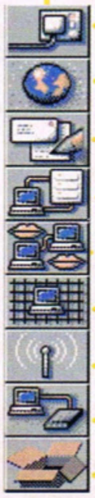
Our aim is to help users with their Internet connection **after** they have purchased Net Connect and we understand that the Internet can be a daunting experience for the beginner.

Issue 2 of our Internet magazine 'Internet Informer' should be available within September. This is a quarterly magazine with the latest information about the Internet and your Amiga - NetConnect users receive this magazine free of charge!

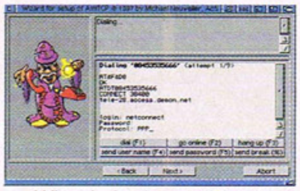
NetConnect v2

NetConnect v2 is even easier to connect to the Internet! Launch the new Wizard GUI, choose your modem, enter a few user details and let the Wizard do all the rest for you! Simple, with version 2 you don't even need to worry about the provider - everything is automatic, everything is point and click! **Amiga Format** concluded about **NetConnect v1** (June 97 issue): "Almost the perfect package for the Amiga Internet user", "If you need to get online, this is the easiest way to do it" and "It's good value for money too - especially the bundle including the 33.6K modem." We have listened to our NetConnect v1 users, noted their comments and added some other new features. NetConnect v2 is available on CD-rom and floppy disk. **Specifications include:**

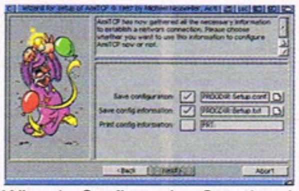
- **New AmiTCP** - NetConnect v2 users will be the first people to use a version of the new AmiTCP! We have added a number of changes to this new version - the main additions are the new Wizard, MUI based dialler and 'events' control.
- **AmiTCP Wizard** - makes configuring your ISP a doddle. Choose your modem, enter some user details and then the rest of the process is completely automatic! This is true Windows95™ style connectivity! See the two example pictures - point and click Internet configuration!
- **New programs** - NetInfo and X-Arc (X-Arc is a brand new WinZIP™ style archive management tool. Downloads lha/lzx files from Voyager/AmFTP/Microdot-II, auto-extracts them into X-Arc's GUI and allows you to control the files.
- **Programs are now keyfile based** (can be used with any TCP stack - Miami etc)
- **Extras pre-configured**: MIME types (CD only), datatypes (CD Only), online help files etc
- **Updated, latest versions of the modules** (Voyager, Microdot-II, AmIRC, AmFTP etc)
- **Printed installation/introduction guide** - install NetConnect quickly and easily
- **Printed manual** - using the Internet and NetConnect
- **Plus many more smaller changes and additions**



- **AMITCP v4.6 DIALUP** — AmiTCP is a new full TCP stack, enhanced and developed by us and NSDi with full GUI control!
- **VOYAGER-NG** — Voyager Next Generation is already powerful with javascript, frames, tables, SSL (https:) etc!
- **MICRODOT-II** — A superb and brand new commercial email and news client, said to be the best for the Amiga!
- **AMFTP** — The industry standard FTP client and the number one FTP program on the Amiga.
- **AMIRC** — Again, the industry standard Amiga IRC client - said to be better that its PC and Mac rivals!
- **AMTELNET** — Use AmTelnet to maintain your web site, connect to external computers, play online games!
- **NET INFO** — NetInfo is a new program by Oliver Wagner to search the net - traceroute, ping, services etc.
- **AMTERM** — AmTerm is a comms program - connect to a BBS, send files to your friends Amiga/PC/Mac!
- **X-ARC** — Brand new DOpus like archive management tool which integrates with the NetConnect package!



Wizard - Loginscript Recorder



Wizard - Configuration Completed

NetConnect v2 CD [contains many extras: datatypes, MIME types (for www browsing) and much more]		£52.95
NetConnect v2 Floppy Disks [only contains the core programs & online help documents]		£54.95
NetConnect v2 Upgrade from v1/v1.1 [registered NetConnect v1/v1.1 users only]		£call!

STFax Professional [available September] — £29.95

STFax Professional is new commercial fax program for the Amiga containing the sort of advanced fax features you would find within commercial PC fax software. STFax has been in the shareware for the last few months, and the brand new commercial "professional" version offers even more advanced features plus some voice control for voice modems.

- Support for all modem classes (1, 2, 2.0)
- Voice control - use your Amiga as a digital answer machine etc!
- Phonebook (store all your favourite fax numbers)
- Scheduler (store fax messages to be sent at specified times)
- Reports
- ARexx port
- Datatypes support for image conversion
- Printer driver to redirect all print-outs to a fax file (print from Wordworth, Pagestream etc!)
- Viewer for viewing outgoing/incoming fax messages
- Plus many more features

High Speed Serial Cards — from... £44.95

The **Hypercom** range of high-speed serial cards offer your Amiga the fastest connection to the Internet, for comms and for fax transfers. Available for the Amiga 1200 (these serial cards are placed within a previously unused expansion port - leaving the PCMCIA port and trapdoor free!) and zorro-II/III based machines (zorro version suitable for A3000/4000 or a A1200 tower). High-speed buffered parallel option available. These cards are currently the fastest serial cards available for the Amiga, making the Internet work faster for you!

Model	Machine	Specifications	Price
Hypercom1	A1200	1 x 460,800bps highspeed buffered serial port	£44.95
Hypercom1	A1200	2 x 460,800bps highspeed buffered serial ports 1 x 500K bytes/sec buffered parallel port	£79.95
Hypercom3Z	Zorro-II	2 x 460,800bps highspeed buffered serial ports 1 x 500K bytes/sec buffered parallel port	£79.95



Hypercom 3

Various Modem Pack Options

Various money saving packs are available. These are all based on either the 33.6k or 56k modem plus a a collection of extras. Call us for other pack options if you have your own pack idea!

CODE	PACK CONTENTS	PRICES £
PK01	33.6 Modem & STFax	£ 89.95
PK02	33.6 Modem & NetConnect	£109.95
PK03	33.6 Modem & NetConnect & STFax	£119.95
PK04	33.6 Modem & NetConnect & Hypercom1 & STFax	£149.95
PK05	33.6 Modem & NetConnect & Hypercom3Z & STFax	£159.95

ADD £25 for a 56k Modem (instead of the 33.6k model)

- All packs come with one month free connection to a major Internet Service Provider
- Other options may be available - call
- Choose between the CD or Floppy disk version of NetConnect with your modem pack
- STFax Professional will be despatched on release

Latest Technology Modems

K56Flex modems are here! Download software and web pages upto **twice** the speed of a 28.8 modem. 56k modems will operate at 33.6K speeds for uploading but you can cut your phone bills drastically when using the 56K technology! Isn't it about time you upgraded that 14.4 or 28.8 modem? For further information about the new K56Flex (Rockwell developed) technology contact us!

We only supply quality **branded** modems (Dynalink UK Ltd), which may cost slightly more than their unbranded competitors, but they ship with a 5 year warranty, the knowledge that a UK company offers support/information and you are buying a modem with quality (Rockwell based) components.

K56Flex modems need to connect to another K56Flex modem in order to use 56K technology (make sure your provider supports K56Flex technology). Call for further technical details.



- Quality branded Dynalink modem (supported by Dynalink UK Ltd)
- 33600 bps DATA/FAX/VOICE modem - true v34. Throughput to 115,200 BPS via V.42 bis data compression
- Group 1, 2 & 3 send/receive FAX (14.4)
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- Auto Answer
- Full Duplex Speaker
- Call Discrimination
- Fax on demand
- Simultaneous voice and data (S.V.D.)
- Message playback via sound card / speaker or headset
- Auto mode detection allows modem to connect with a modem that is configured for differing connection modes
- Extended AT (Hayes compatible) command set
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- Amiga 25pin and Surf Squirrel/PC 9pin serial cable included
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POSTAGE/DELIVERY

CD's	- 50p per CD for UK delivery - £1 per CD for EU delivery - £2 per CD World delivery
Modem	- £3 for 2-3 day delivery - £5 for next day delivery - £15 for Saturday delivery

Make cheques/P.O.'s payable to Active Software and send to the address listed opposite. We can accept credit or debit card orders. For any additional information call us ASAP!

WANT MORE INFORMATION?

We provide an information pack covering NetConnect and the modules (Voyager, MD-2 etc), the modems we offer, connectivity discounts and a set of frequentely asked questions and answers. Ask us to send you an info pack!

You can also access the NetConnect homepage for additional info, latest news and to download a time-limited demo version of the software: http://amigaworld.com/netconnect

VAPORWARE PRICES

If you are not interested in buying NetConnect, you can still buy Vaporware Products individually:

Voyager Next Generation	£20.00
Microdot-II	£18.00
AmIRC	£18.00
AmFTP	£18.00
AmTalk	£12.00
AmTelnet + AmTerm Package Deal	£18.00

- 5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+
- Note that the Vaporware products are e-mail only but can be sent on floppy for a surcharge of £2.00 per product.
- Other Vapor titles available - http://www.vapor.com for further information

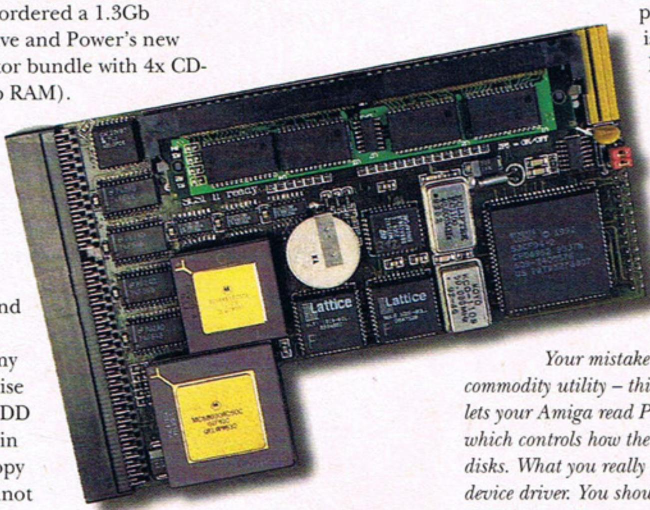
Workbench

Problems with your power supply? Graeme Sandiford is the man with the answers so find out what he's got to say about floppy disks and CD32's. Send your own queries to: Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

PC DISK ERROR

I am currently using an un-expanded A1200 and have ordered a 1.3Gb internal hard drive and Power's new Viper 5 accelerator bundle with 4x CD-ROM (and 16Mb RAM).

1. Last week I downloaded the Sabrina Online cartoon strips from Aminet. Unfortunately, I was using a PC and I'm having great trouble getting my Amiga to recognise the disks. I used DD disks, formatted in Windows95 to copy files to, but I cannot read them on the Amiga. I have tried double-clicking on the PC0 commodity in my storage disk but the PC0: icon does not appear. Even other PC disks give the same results.



The Viper 5 comes in a bundle from Power Computing – a great way to upgrade your machine.

2. With a 1.3Gb hard drive, the Viper V and 16Mb RAM, will I need a more powerful PSU? What is the new "Power Box" from Wizard like?

Neil A. Davidson Kelly
Glasgow

1. The Amiga is perfectly capable of reading double density disks formatted on PCs. Your mistake was in using the PC0 commodity utility – this isn't the file which lets your Amiga read PC disks, it's the utility which controls how the Amiga reads these disks. What you really want is the PC0: device driver. You should find this in the DOSDrivers directory of the "Storage" floppy disk. When you mount it (by double-clicking) you should then see the new icon appear.

2. With a hard drive, CD-ROM and an accelerator card, you may well need a new power supply. Have a look at our comprehensive round-up on page 63, where we look at the Power Box as well as PSU's from Blittersoft, Power and Eyetech.

BIG SPEED UP?

I have recently upgraded from an A500 to an A1200, which I mostly use for 3D rendering and image processing, as well as playing games. I am already starting to upgrade and hope to have a hard disk soon.

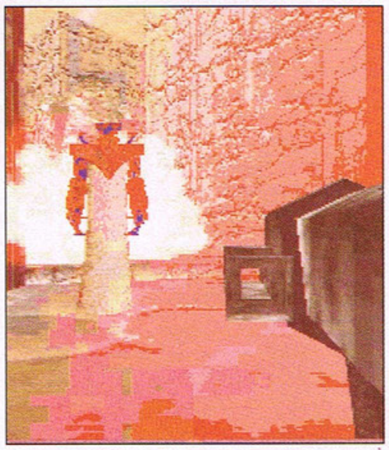
1. I am very interested in Power Computing's Power Bundle; (CD-ROM, 50MHz '030 accelerator, 8Mb SIMMs). I notice that an FPU is not included; how much of a difference would one make to rendering programs? Would it affect games like the *The Killing Grounds*?

2. I have read that the A500 PSU can be used on the A1200, when more power is needed. Is this true?

3. As expected, a number of older games, (*Shadowlands, ShadowWorlds, Warhead*), no longer work. I have tried a number of degrader programs; the *Assassins* A1200 fixit disks and *Retrokill 1.4*, but with no success. Can you recommend one that would work? Do publishers produce patches for this problem?

Nicholas Williams
Newport, Gwent

1. An FPU makes a big difference when rendering – if you do enjoy rendering, it's well worth the extra money. As long as you have



You won't find floating point routines in *AB3D II* so the FPU will have no effect.

Continued overleaf ➡

A Quick Guide to...

FLOPPY DISKS

1 The Amiga uses double density 3.5" drives which can store 880K or so of data. The Amiga will detect when a disk is inserted or removed (this causes the ticking sound you hear whenever no disk is present in the drive).

2 The A4000 and some A3000s have a high density disk drive. This drive works with ordinary Amiga disks, but can also store twice as much data on HD floppies.

3 Most corrupt disks are caused by three things: cheap disks, removing the disk while the Amiga is writing to it, or storing the disk in an inappropriate location (near a speaker magnet, on top of a monitor, next to a heat source).

4 The Amiga can read and write to PC format disks, although because of hardware limitations the PC cannot read or write Amiga format disks. The Amiga drive hardware can also read Apple Macintosh format disks.



5 The Amiga can support up to four floppy disk drives at once, although you would probably need a larger power supply to cope. And it would be a bit silly anyway.

6 It is possible to add a high density drive to your Amiga. Power Computing sell the XL drive, and with third party add-ons such as "Catweasel" from Blittersoft , it's possible to add PC disk drives to the Amiga.

the FPU-specific version of the rendering program, you can speed things up by as much as 50 per cent. However, the FPU will make no difference to other programs. To use it, the programmers must make use of routines which are only available when the FPU is present. These extra routines are all associated with floating point mathematics and are of little relevance to most games.
2. *Yes, many A500 power supplies have a higher power output than the A1200 unit, and it's safe to plug them in to try them.*
3. *The best way to get older games to run is to get on-line and ask on the Internet. On the various Usenet groups you'll find all the answers you need. Some publishers did issue patches, but most games which are used today rely on hacks written by individuals.*



If your A1200 crashes don't assume anything!

POWER STRUGGLE

I have read in many issues of *AF* the on-going saga of upgrading your A1200 and buying a new PSU. I have upgraded my 1200 as follows: Apollo '030 with FPU + MMU, 16Mb RAM, 120Mb hard drive, Sony 2.4 speed, external CD-ROM, via a Squirrel, and an AT monitor. I too was worried about the power consumption and managed to get my hands on my mate's Goliath PSU. I plugged in the Goliath and promptly suffered crash after crash. I thought my new accelerator had not been fitted correctly but that was not the case. I spent a while trying to find the fault and finally realised that the centre pin on the Goliath's 5-pin connector was not the same size as my original PSU. This, I believe, was the cause of the crashes. The PSU power output is not at fault.

To cut a long story short I reverted back to my original PSU and have not suffered a crash since. The moral of the tale is "try before you buy." It might just save you £60.

Graham Beech
BFPO 40

A frightening tale indeed. I wonder how many unexplained A1200 crashes are actually down to a badly fitting pin in the power connector? Worth checking if your computer seems to fail for no readily apparent reason.

YELLOW PERIL

I have an A1200, a 170Mb Seagate hard drive, a 4Mb fast RAM expansion card and a Squirrel SCSI driving a Power Computing CD-ROM drive, connected to a JVC SCART TV via the video port. This has worked perfectly until today. I switched on my computer (the Squirrel was not attached) to find the TV tinged with a dark yellow hue. Nothing I do will rectify this, (including disconnecting all peripherals) and everything else still seems to be working fine. I have tried attaching my A1200 to another TV by SCART and RF but it is the same. I thought I might need a new modulator but if this was the case, would the picture through my video port not be OK? I have searched all my back issues but cannot find anyone else with a similar problem.

Keith Wilson
Mid Lothian

If your Amiga produces the same yellow-tinged image on two different displays, and assuming that you checked the leads carefully for missing or loose pins, then bad news: your Amiga is busted. You guessed right that the modulator isn't to blame: demonstrated when you achieved the same results with the video port. It's possible that the custom chip responsible for the graphics has been damaged by static electricity. Sorry.

PC AMIGA GFX

I have been a PC and an Amiga user for quite some years now. For graphics my PC is useless but on an A500+ with 1Mb the graphics are great.
1. I would like to know if there is any way to transfer some of my graphical data from the Amiga to the PC? I have heard of *CrossDOS* on Workbench 2+ and the possibility of networking both computers using a null modem cable but I would be really thankful if you could help me.
2. I bought a Lexmark 1020 colour jet printer and I cannot find a printer driver that I can use for my Amiga as well as my PC. I have tried contacting the Lexmark company who produce the printer but they told me that I have to run the software driver provided on a computer running either *Windows 3.1* or *Windows 95*. I find this hard to believe as I used a Citizen Projet printer with the *HP Deskjet 500* printer driver on the Amiga. Please could you help me, as I am in dire need.

Alan MacDonald
North Lanarkshire, Scotland

1. *Yes, getting Amiga data onto the PC is quite straightforward. The simplest way is to use a utility such as* CrossDOS *which allows the Amiga to read and write to double density floppy disks. If your system didn't come with* CrossDOS *(which appears as a device called PC0: in the devs: directory (or on the Workbench floppy disk set) then you should contact a Public Domain library and get one of the several excellent utilities which achieve the same goal. Ask for* MessySid *for example.*

You will then be able to save your graphics onto the PC-formatted disk (make sure it is formatted to DD, not HD format) and read them on your PC. You may need to search around for a file format which is supported by the software you are using on both the Amiga and the PC.
2. *At first I thought that the Lexmark might be one of those units which rely on a PC running Windows to perform some of their internal processing: the result is a faster and cheaper printer, but one which is definitely only compatible with Windows. However, the Lexmark is a fairly ordinary colour inkjet so this isn't likely to be the case.*

However, after considerable effort I have been unable to track down a suitable driver. Perhaps if someone reading this knows of a suitable driver, they'll be good enough to write in and let us know.

PLAIN OLD LINK UP

I have a plain old A500 and a plain A1200, with a 20Mb hard drive. I've got a monitor and a TV with a 520 modulator. I'd like to connect the two computers. Will I need *SERnet*? If so, where from? What cables do I need? Also, will I be able to use *Capital Punishment* on my A1200, with only a 20Mb hard disk? Will I have to delete some *Workbench* files and repartition my hard disk?

Tristan Seeney
Cornwall

Yes, you can use* SERnet *although* PARnet *will be faster. Apart from the different ports used (*SERnet *uses the serial port,* PARnet *the parallel port) both programs are practically identical. Both are freely distributable so you can get them from a PD library, download them from the Internet or find them on a magazine Coverdisk. Both require a cable to be made up, but if you don't fancy soldering this yourself then contact some of the advertisers in AF as many will be happy to sell you a suitable lead. Capital Punishment needs 15Mb of hard drive space, so you'd be better off buying a bigger hard drive first.

MORE LINKS

I have got an Amiga 1200 and I have just obtained a CD^{32}. Is there any way I can connect the two together, so they work as one?

Mr M. Fox
Scunthorpe

Yes, you can link them and this will allow the A1200 to access files stored on CD-ROMs inserted into the CD^{32}. You will need software called* SERnet *and a suitable cable. You'll also need a suitable CD to run on the CD^{32}. Weird Science advertise a whole system if you're feeling lazy.



The CD32 can be expanded with either the SX-1 or the newer SX-32.

THE SX FILES

I am having problems with my SX-1 expansion for my CD32. The first thing I bought for it was an industry standard 72 pin-SIMM (8Mb) and everything worked splendidly. About a week ago I added a Seagate 121Mb hard drive, prepped and formatted it correctly and was looking forward to using it. Fat chance! As soon as I opened a window on *Workbench*, it just locked up at me. I reset from the CD32 and started again. Same problem, and I can't even warm reset from the keyboard. I took the SIMM out and everything worked fine again. I assumed the PSU was too titchy so I took off the floppy drive and printer, but still the same lock-up. The only time everything is compatible is when either the hard drive or the SIMM is removed. Is there anyone out there who has had these problems? Is 8Mb too much for this expansion unit? Seeing as the problem has got me beat, it seems that not only am I stuck with an '020 processor, I'm also stuck with a 2Mb chip and no other memory.

Mr M. Bond
Plymouth

Oops... I'm afraid I don't have much (Okay then, any) experience with the SX-1, so I asked around on CIX. Seems that it should be able to support both the 8Mb SIMM and the hard drive, but there are reports of the combination occasionally causing crashes. Although you have experimented with the PSU already, this might still be the problem – certainly the printer isn't going to consume any power by itself.

SCSI ERRORS

I keep getting requestors informing me that the 1Gb Quantum hard drive in my A3000 (all partitions are affected) has a checksum error on block xxxx (numbers vary, the error is not consistent). The errors reported on *WB 3.1* tend to be clustered around the 50,000 – 75,000 block area. This problem seems to arise every few weeks and has in the past been "cured" by the use of *DiskSalv* and *Quarterback*. The problem now however, is resistant to cure. I have run *DiskSalv* which does one of two things: (a) runs through the partition, picks up some errors and repairs the partition, but the checksum error requestor still appears, or (b) locks up midway through the procedure with no error messages.

I do not understand what is happening. The *DOS* and *Workbench* manuals with *Workbench 3.1* do not seem to cover a checksum error. It seems to me that the problem is one of the following:

1. a fault within the hard drive
2. a fault within a chip on the motherboard
3. an OS error that is wrong
4. a virus of some description

I should point out that all the data has been backed up, so there is no problem with reformatting the drive (if necessary). Any assistance that you can provide would be greatly appreciated.

Phil Jones
Ceredigion

SCSI can be fun, can't it? It does look to me as though the hard drive itself is malfunctioning. You should try a complete low-level reformat and see if that sorts it out. If you can use other SCSI hardware then it's unlikely that your SCSI interface itself is at fault. However, if you are using other hardware – an external SCSI Zip drive or CD-ROM for example – make sure that you have terminated the drives accordingly.

UNABLE TO COPE

1. I am a regular reader of *Amiga Format* and I changed my order to the CD version from issue 96 because I had ordered a CD-ROM drive from Eyetech. I received it and installed it two days ago and I am over the moon with it. But on trying a few programs on your Coverdiscs I have had messages coming on screen such as "unable to open your tool Viewtek," and "unable to open your tool Installer," also "RENDER.LIBRARY V16 2+." Could you explain these messages to me, and how and where I can find them, otherwise I'm not going to be able to get the full use out of the CDs.

2. In issue 93 I was very interested in the answer you gave to the letter from Colin Clifford-Smith of Southampton. I was having no problem with my hard drive until I purchased my Magnum expansion. When I fitted it, it just kept freezing the screen until it sort of got warmed up, which meant I had to reboot about three times before it would work. But since I took it apart so that I could fit the CD-ROM drive, it has worked fine first time.

Mr Harold Bell
Thornaby, Cleveland

1. *Don't panic! The Amiga is reporting errors because it cannot find the file it is looking for in its default search path. In other words, when you click on – for example – a picture, the picture file's tooltypes tell the Amiga to use* Viewtek *to display the picture. However, when the Amiga tries to load* Viewtek *it discovers it can't find it. Why?*

SX-1 JUMPERS

Here's a list of the jumpers inside the SX-1, the expansion unit for the CD32. This information came from the CD32 FAQ, which is kept at the following site:
http://mopo.cc.lut.fi/~veijalai/faq/CD32-FAQ.html

Jumper	Status	Purpose
1	OFF	When 1Mb or 4Mb of memory is added
	ON	When 2Mb or 8Mb of memory is added
2	OFF	When 1Mb or 2Mb of memory is added
	ON	When 4Mb or 8Mb of memory is added
3	OFF	When any memory is added
	ON	When no memory is added (or defeat autoconfig)
4	OFF	Normal boot time
	ON	Add 10 seconds to boot time (for slower hard drives)
5	OFF	If keyboard has two Alt keys
	ON	If keyboard has no Right-Alt (Right-CTRL used instead)

Continued overleaf ➡



Make sure you run the file on the CD that is called +AFCD_Setup+. If you follow all our instructions you shouldn't have any problems.

Because it's not in the default search path. All you need to do is make sure that you run the file on the CD which is called "+AFCD_Setup+". These files are there to add the necessary details to the search path.

2. *Sounds like you have to be extra thorough when fitting the Magnum expansions, and ensure that they are pushed home firmly. If possible, give the connectors and motherboard a quick rub down with some contact cleaner before fitting cards.*

UPGRADE OR ELSE

I recently acquired a completely unexpanded Amiga 1200, save for a 3.5" external disk drive and a dot matrix printer (parallel port) and would appreciate some advice on the best methods of upgrading.

1. I realise a hard drive is an essential piece of kit, but I don't know what size I would need, or where I can get one.
2. I heard of a Blizzard accelerator which runs at 50Mhz – how much extra RAM would I need to support it and can you buy it all together?
3. Finally, if I got all this kit, would my current power supply unit cope or would I need a new one?

Paul Logan

1. *If you intend to use your Amiga a lot, then I would recommend you get a hard drive. You will only need one of 100Mb or more unless you get into graphics or some other memory-hogging pastime in a big way. A flick through the adverts in this very magazine should sort you out – have a look at the Eyetech advertisement for example.*
2. *The Blizzard accelerator is very fast and in order to get the most from it you will need at least 4 or 8Mb of memory. You can buy the card and memory at the same time, and you might save a few quid in this way.*
3. *The standard PSU should be able to cope.*

FONT OF ALL KNOWLEDGE

Until now I have used my A1200 almost entirely for word processing. My Amiga is fitted out with 12Mb of memory, 1.2Gb hard drive and an Apollo 68040 / 68060 accelerator. I also have a Power CD-ROM and Canon BJ-10sx printer. I like graphics so when I got *PPaint 6.4* with *AFCD12* I installed it in the Workbench partition and made an assign to the s/user-startup.

The program seems to work alright until I try to enter the text tool's list of available fonts. My computer then stalls with the "Program Failed (error 80000003). Wait for the disk activity to finish." Now it won't even open *Personal Paint,* with the excuse that "the user interface text file can not be opened," unless I run *PPaint* straight from the CD. Then it reverts to the Error 80000003 warning, the only solution then being to reboot the computer.

I would like to upgrade *PPaint* but how can I overcome this problem? Obviously there is nothing wrong with the program because it works perfectly with my son's A1200. He hasn't got the accelerator on his computer. Could this be the source of the trouble? Can you please help?

Frank Fortune
Kirkcaldy, Fife

You can test to see if the accelerator is the problem by simply removing it. It would seem that one of the fonts in your collection is causing Personal Paint *some bother – I would suggest that you try to copy all but the most common fonts (temporarily at least) to a new location and see if that solves the problem. It is definitely worth persevering as* Personal Paint *is an excellent and very flexible program.*

IF YOU HAVE A QUERY...

At *Amiga Format* we aim to answer as many questions as possible. Unlike some magazines, we don't just concentrate on our areas of expertise – we take on all your problems (as long as an Amiga is involved). Here are a few tips on sending in questions:



Graeme Sandiford

- Be concise.
- Detail the problem as best as you can.
- Describe the events that caused the problem.
- Give full details of your equipment.
- Make sure your question is relevant and wouldn't be more easily solved by contacting the dealer from whom you bought the goods.

Bear these points in mind and fill in, photocopy, or copy the form below as best you can. Unfortunately we cannot reply personally.

Send your letters to Workbench, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

Your Amiga:

○ A500 ○ A500 Plus ○ A600
○ A1000 ○ A1200 ○ A1500
○ A2000 ○ A3000 ○ A4000

Kickstart version

○ 1.2 ○ 1.3 ○ 2.x ○ 3.x

Hard Disk: .... **Mb**

Manufacturer: ....

Extra RAM fitted – type, size, (Mb) and manufacturer:

....
....

Details of other hardware:

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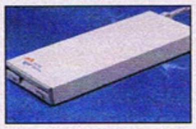
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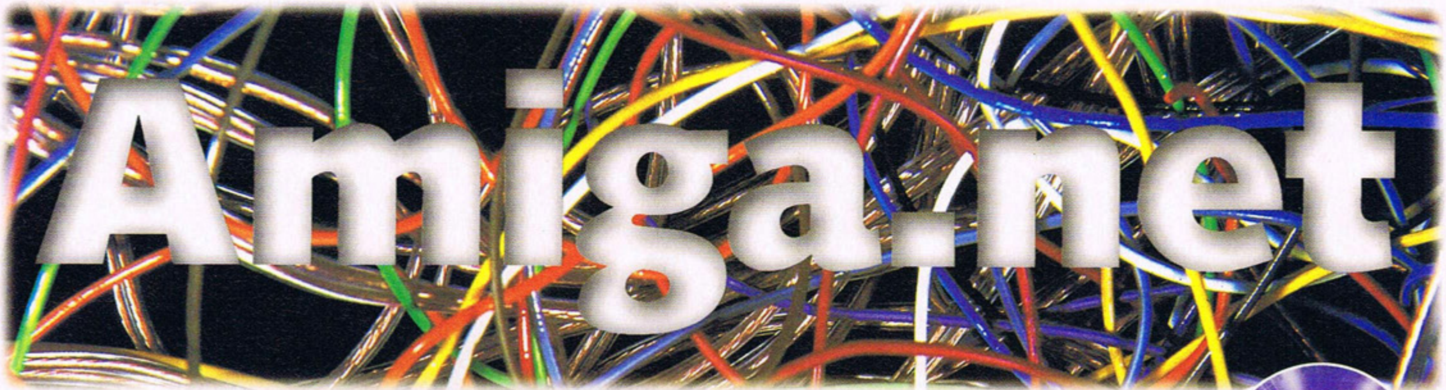
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Dave Cusick investigates the security risks of using your Amiga to surf the Internet.

AFCD17:-In_the_Mag-/Amiga.net

ON THIS MONTH'S CD

Several weeks ago the Net world was shaken by some worrying news. It seemed that several versions of *Netscape Navigator*, the most widely used Web browser today, contained a security hole which could potentially be exploited to damaging effect by unscrupulous hackers. Within a few days of the attempted black-mailing of Netscape by the Danish hacker who first uncovered the flaw, a fix was found, but the issue of Net security has been a hot topic ever since.

Fortunately, since the Amiga is a minority machine on the Internet, we don't have much to fear from malevolent hackers, even if similar security holes exist in native Amiga browsing software – and there's no evidence of that. But that's not to say you or your computer are completely safe, because Net security is about more than just protecting your hard drive from PC-owning hackers.

Let's start with the most obvious point: think carefully before inputting personal details into a Web page form. While a site may claim that it only wants them for personal use, it is surprising how many Web pages already exist offering searchable directories of people's telephone numbers, and sometimes addresses. Several months ago there was outcry when *Yahoo!* offered an 'American people' search feature which provided maps showing where individuals lived. Although the service was subsequently withdrawn, the fact that providing it was possible in the first place should serve as a warning. While it may be true that in some parts of the Net nobody knows if you're a dog, on the Web it's very possible that someone who wants to, could find out exactly who you are.

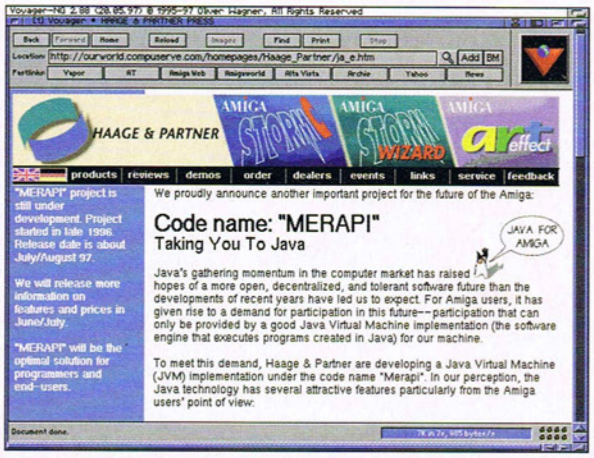


Sun Microsystems were responsible for developing Java, the new programming language that everyone on the Net is talking about.

> **"You're not completely safe... Net security is about more than protecting your hard drive from PC-owning hackers."**

WE KNOW WHERE YOU LIVE

The best way of safeguarding your personal details is to never enter them into a Web form at all, but in reality there are many excellent sites which won't allow you to access them until you have registered. If you feel you have no choice but to register, give only your essential details, as this will at least minimise any potential risk factor.



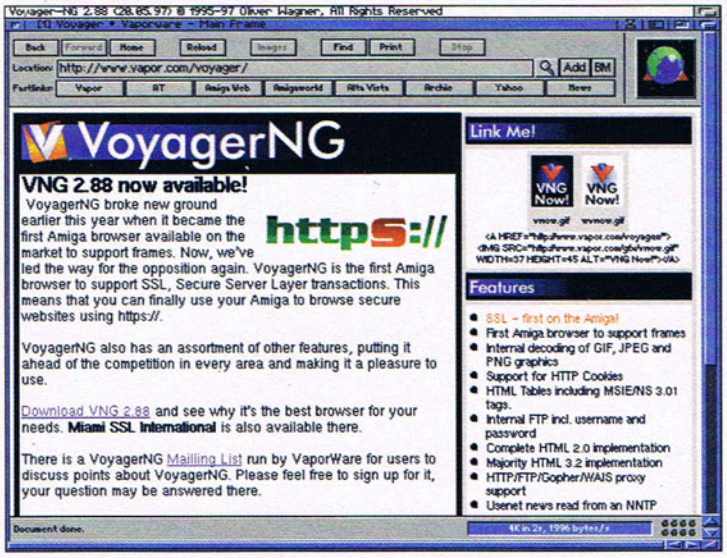
Haage & Partner's *Merapi* project (a Java Virtual Machine (JVM) Implementation) could help breathe new life into the Amiga market.

The only time when you have to give your personal details ought really to be if you are engaging in an electronic commerce transaction – in other words, if you're using your Amiga for Internet shopping. Before you even consider doing this, make sure you have a browser which supports Secure Socket Layers. At the time of writing, *Voyager NG* is the only Amiga browser which supports SSL, although an SSL module is promised for *IBrowse* in the near future. If you use an emulator such as *ShapeShifter*, *Netscape Navigator 3* would be suitable too. Of course, having client-side SSL support means nothing if the server isn't secure. You can tell if a server is secure because the URL will include https:// instead of the usual http:// prefix. If you're in any doubt about this, err on the side of caution. Although the chances are you could get away with transmitting your credit card details without security, there's a definite risk involved, so avoid it.

A BAD COOKIE

Another security feature which only *Voyager NG* includes at the moment is the option of rejecting cookies. Cookies have had very bad press recently, but not many Net users seem to understand their purpose. Cookies are small text files which are stored on your hard drive by your browser. These are created by remote sites and contain details about you and your browsing habits. Commonly, cookies store details such as the date of your last visit to a particular site, any passwords which might be required to enter the site, and so on. They are used on some software sites to offer lists of files uploaded since your previous visit, and by certain search engines when determining which adverts to show you – InfoSeek, for instance, will show you adverts for products which your previous searches have indicated you might be quite interested in.

Potentially, cookies could be used to spread those details around the

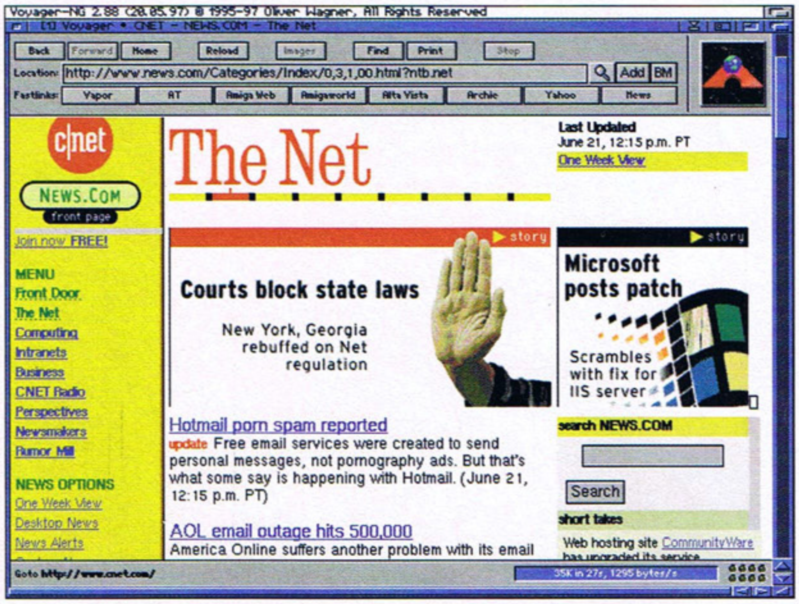


At the present time, the browser of choice for more security-conscious users must surely be Olli Wagner's *Voyager NG*.

Internet, but in reality they are only as dangerous as you make them, because they only contain details which you have put into your browser. If you're worried about cookies monitoring your browsing patterns, you can delete them all from your hard drive and refuse to accept new cookies when a site wants to create them. A less extreme option is to only accept cookies from sites which you are sure you want to share your details with, and to check through your cookies drawer at the end of a surfing session. A third option is to surf anonymously using *Anonymizer* – the *Anonymizer* Web site contains details of how to do this.

NIFTY TEXT TOOLS

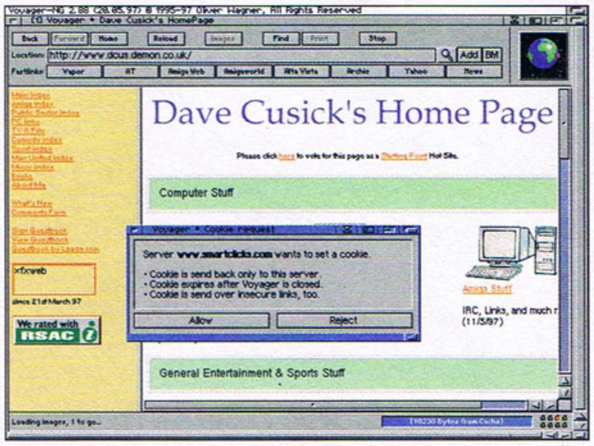
Cookies are generally created by CGI scripts, located on the remote server. They can also be created using Javascript – another aspect of the Web which many users might not understand. Here follows a quick definition: Javascript was originally created by Netscape but has subsequently been implemented in many Web browsers including *Voyager* (from version 3.0 onwards). Javascripts are embedded within HTML documents and have many uses, ranging from fancy effects to exact control over your browser windows. They cannot damage your machine. Although early versions of *Navigator* had some Javascript security holes, which made it theoretically possible for files on your hard disk to be copied to the remote server if the exact path name of those files was known, the implementation of Javascript in *Voyager NG3* does not suffer from these problems – and besides, Amigas do not have all-important Autoexec.bat files to copy, unlike certain other machines we could mention...



When the news appeared on sites like CNet's News.Com that a Danish hacker had found a security hole in Netscape's *Navigator* and *Communicator* software...



...Netscape programmers had to work extremely quickly to release a patch before public confidence in their products suffered too badly.



Voyager warns you whenever a site wants to set a cookie.

Javascript should not be confused with Java, the use of which could potentially involve a risk. Java looks set to finally come to the Amiga when Haage & Partner release *Merapi* (due in August). Java applets are platform-independent executables, which are stored on the remote server, but are actually downloaded to your machine and executed there. This means they could potentially start messing around with your computer. Fortunately, the risks are far lower to Amiga users than they would be to PC (or even Macintosh) users, because malicious Java applets might be targetted specifically at Windows95 users. Nevertheless I would advise caution in executing Java applets from sites you do not completely trust, and if Merapi allows users to choose whether to execute individual Java applets, it would be a useful and welcome feature.

SITES OF INTEREST

Voyager NG:
http://www.vapor.com/voyager/

The Anonymizer:
http://www.anonymizer.com/

WWW Security FAQ:
http://www.genome.wi.mit.edu//faqs/www-security-faq.html

Java FAQs:
http://www-net.com/java/faq/

Sun Microsystems Java page:
http://www.sun.com/java/

Merapi:
http://ourworld.compuserve.com/mepages/Haage–Partner/ja-e.htm

CONTACT POINT

You can reach Dave Cusick with comments, suggestions and feedback at dave@dcus.demon.co.uk. He also has a Web site at: http://www.dcus.demon.co.uk/

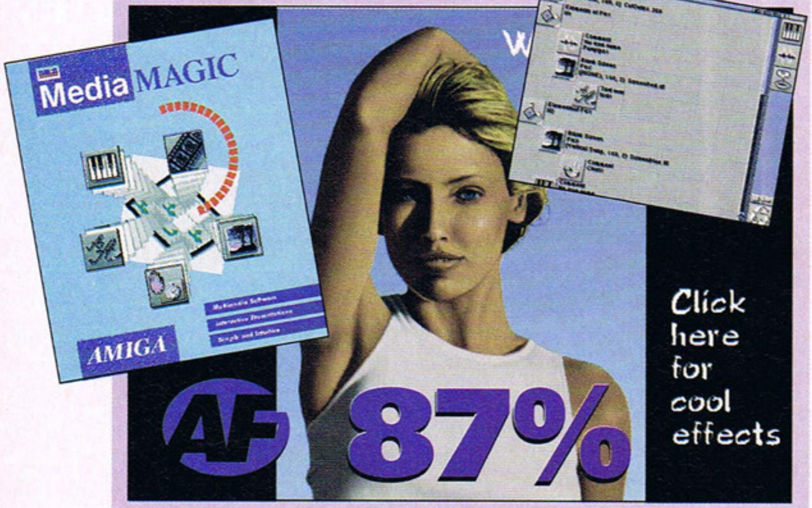
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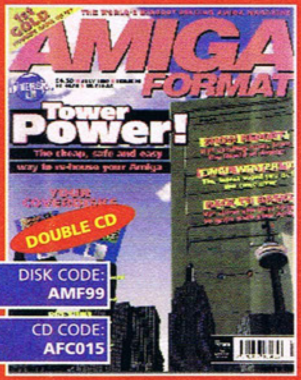
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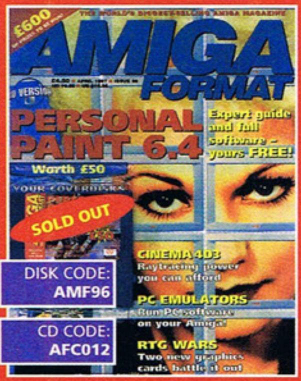
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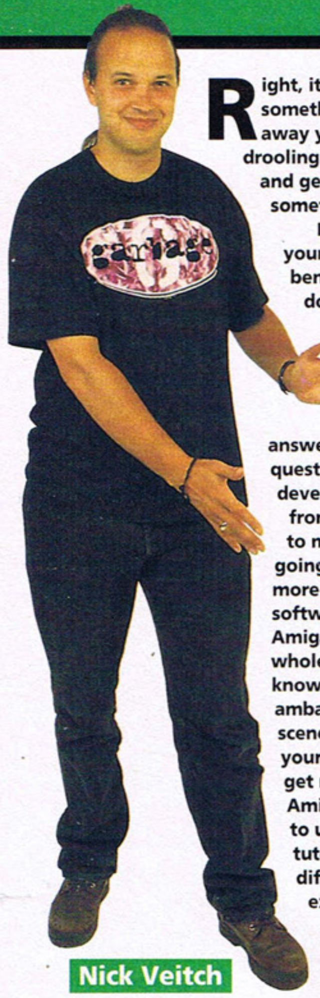
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The indispensable guide to getting the most out of your software

CREATIVE



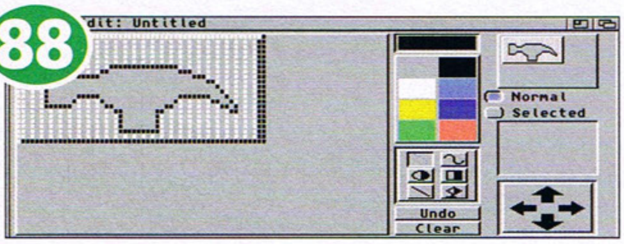
Nick Veitch

Right, it's time to do something useful. Put away your games, stop drooling over those reviews and get ready to do something useful.

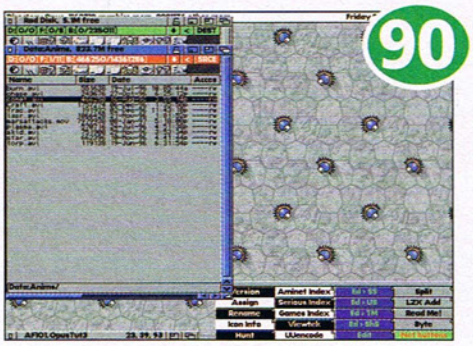
Learning how to use your Amiga is not only beneficial to us (we don't have to answer so many of your questions – or at least, we can answer more difficult questions), to Amiga developers (everyone from shareware authors to major developers are going to benefit from more people using their software) and to the Amiga community as a whole (a whole load more knowledgeable ambassadors of the Amiga scene), but also to yourselves. You really will get more out of your Amiga if you know how to use it. There are tutorials here for different levels of expertise and in different areas of interest – and if we aren't doing what you'd like, then you can simply write in and ask. So you really have no excuse, dust off your Coverdisks and get to work.

BEGINNERS GUIDE 88

It may seem simple to some, but not to quite a few of you. Brush up on the basics of using your Amiga.



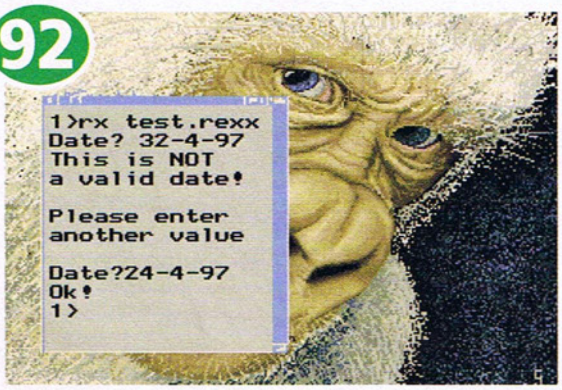
DOPUS 5.5 90



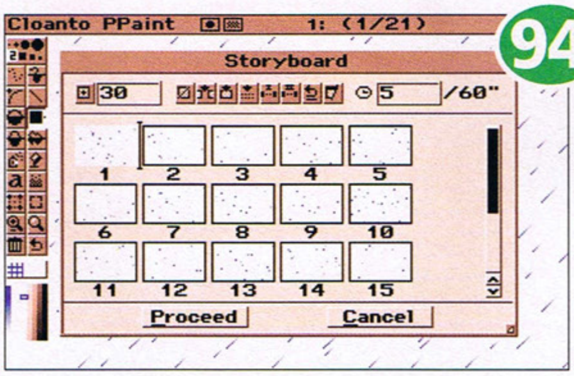
Don't be put off by an LZX or confused by a CDXL ever again. Our own **Ben Vost** is here to help you set up your *DOpus* filetypes to recognise almost any file on earth.

AREXX 92

Why does this monkey care what the date is? The answer can only be revealed in another thought provoking ARexx tutorial from **Paul Overaa**.



PPAINT 94



Rain is wet, and it falls from the sky. It is also very easy to animate if you follow our extensive tutorial.

SEND IT IN!

We need YOUR input.

Is there something that you would like to see covered in one of the current tutorial series? Why not send your suggestion to us at the magazine. Here are some things you might like to think about:

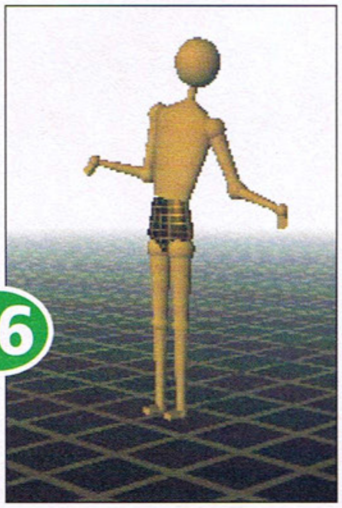
ARexx
Commodore's excellent decision to include Arexx with Workbench was only matched by their stupidity in not documenting it properly. If you are having trouble why not write to us with a description of what you are trying to do.

Paint Packages
Unsure of how to get a particular effect? Do you think there must be an easier way? Our experts could help.

Personal Paint
Surely some of you have some questions about our latest giveaway?

Contact us at:
AF Creative • 30 Monmouth Street
Bath • BA1 2BW
Or email: amformat@futurenet.co.uk
putting "Creative" in the subject line.

CINEMA4D 2 96

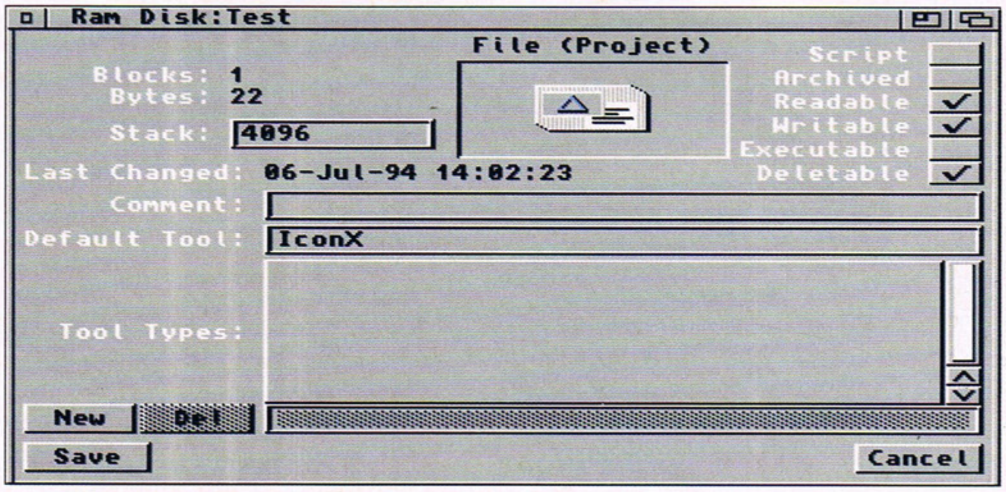


As this chap surveys the worsening weather, **John Kennedy** explains more about animation, and how to use the many different effects built in to *Cinema 4D*.

Beginners Guide

CONTENTS

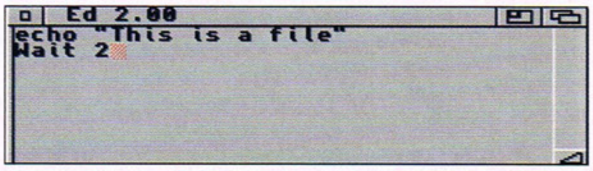
This month Robert Polding looks at the ways in which a disk is organised and guides you through creating both files and directories.



The *IconX* program simply runs shell scripts through Workbench.

Want to get things done? Well you need to be organised and if you're working with computers that means structuring the way your machines and disks are set up. All computers use similar methods of storing data on a disk and all disks are made up of directories and files. A directory is a section of a disk that contains certain types of files and a disk usually contains a 'root directory,' other directories, and even sub-directories. If these didn't all exist there would be hundreds of files in the 'root' (bottom) directory of the disk, and it would be impossible to realistically manage them. For example, on the Workbench disk there is a Utilities directory and the files contained within it include the *MultiView* and *Clock* programs.

On the Workbench, a directory is represented by a drawer icon, and if you create a new directory using Workbench (or *Directory Opus*) an icon is added. To illustrate how this is done let's make a directory called 'Test' in the RAM disk (temporary memory). First of all, open the 'Ram disk' icon and select the menu item 'New Drawer' from the Window menu. (Alternatively you could press the Right-Amiga key and N.) A requestor will appear asking for a new name for your directory, so delete the text 'Unnamed 1' and replace it with 'Test'. You can now open your new drawer.



Congratulations! You've just created a short and simple script...

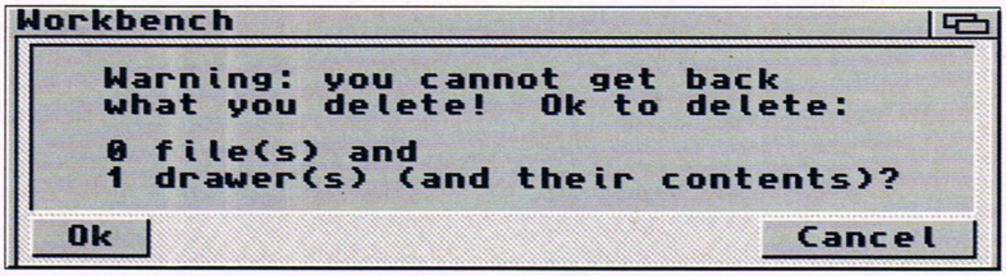
DRAWER SPACE

To copy a file into this drawer all you need to do is drag it into the window or over the drawer icon. If, for example, you wanted to copy the *Clock* utility into your 'Test' directory, you would firstly locate the program in the Workbench: Utilities drawer and then simply drag it over. At the moment this drawer has no practical use, but hard disk owners will find the creation of drawers very useful for creating directories for different types of programs.

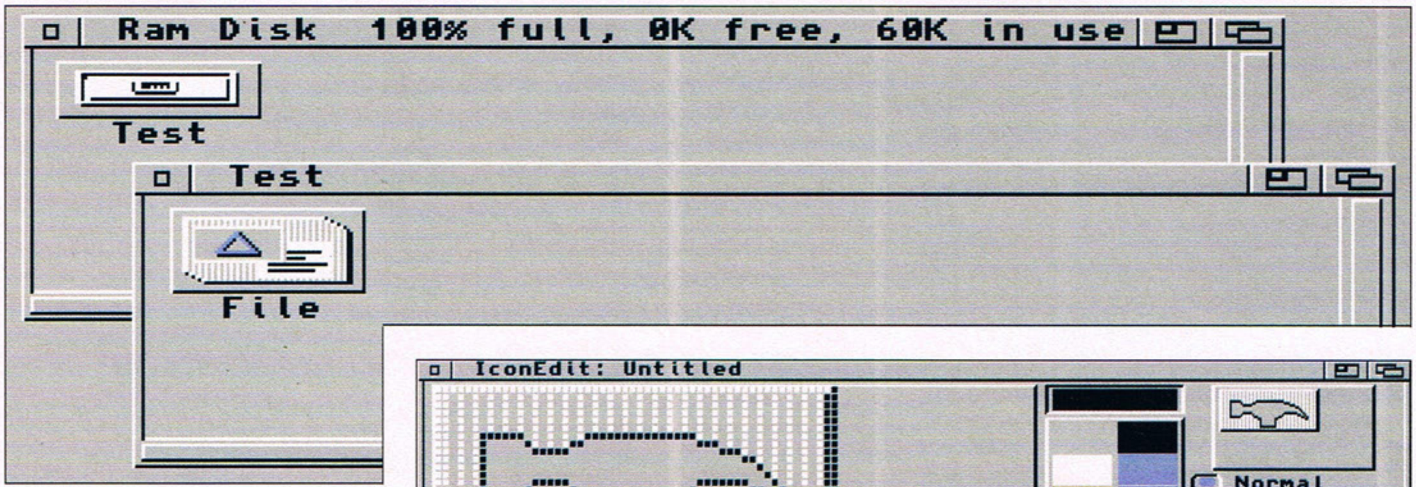
Files within directories can be either scripts, programs or data files and we'll now have a go at creating a simple script file. This is done through the Shell program in the 'System' drawer of your Workbench disk. Open a Shell and type:

`ed RAM:Test/File`

Press Return and this will make a new file in the directory 'Test' called 'File'. A file can be called anything you like but there is a restriction of 32 characters for the name. The 'ed'



Remember to exercise extreme caution – once you have deleted something there's no going back!



Create a drawer called Test and then a file to go in it called, uh... File.

command launches a program for editing files and creating scripts. When the program is loaded type in the following line:

```
echo "This is a file" [Return]
Wait 2
```

Then press the 'Esc' key followed by 'x' and Return. This is a short and basic script – don't worry about understanding these commands yet, as they will be covered when we take a more in-depth look at Shell.

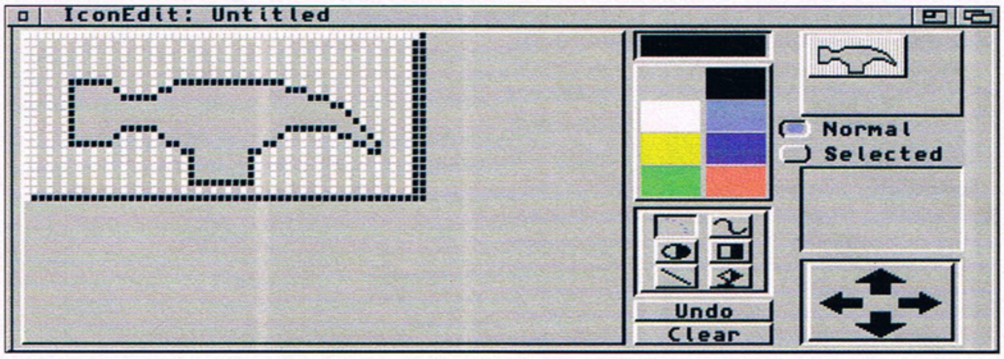
MEANINGFUL ICONS

In order for your file to be accessible from Workbench it will need an icon. To create an icon you need to go into the 'Tools' drawer (on either your Workbench partition or extras disk) and open the program *IconEdit*. This allows you to edit and add icons for programs. Go to the menu 'Type' and select the item 'Project' – this changes the icon to recognise the filetype as a script. Now select 'New' from the 'Project' menu and click 'Start New' from the requestor. This will make an appropriate icon (in this case a project). Now select 'Save' from the 'Project' menu and click on the 'Volumes' button. Next select the RAM disk, open the Test directory you created, select the file you created and click on the 'Save' button.

Now we must tell the computer what to do with the file once you double-click on it. In order to do this we must define the 'default tool' to run. Close the *IconEdit* program and go back into your drawer where you will find a new icon. Select this icon (single click with the left mouse) and go to the 'Information' item from the Icon menu. Click on the text box next to the label 'Default text:' and type:

```
c:IconX [Return]
```

Now click on Save and try double-clicking on the icon. If all went well a window will open with the text "This is a file" written in it. The *IconX* program simply runs Shell scripts through Workbench. You can now rename the file by single-clicking on it and selecting the 'Rename' item from the Icon menu. Change the name to 'My_File'. Remember that it is better to use underscores (_) or dashes (-) instead of spaces because some programs don't like them. It's best not to use colons (:) or backslashes (/) for the same reason).



Create your own icons or edit ones you've already got using *IconEdit*.

NOW YOU SEE THEM...

You can also delete icons but you shouldn't try this on any icons in your Workbench disk because once you delete something you cannot get it back! We can, however, delete the file and directory we have just created as they serve no real purpose. If you delete a directory you also delete all the files contained in it, so make sure you check the contents before going ahead. In order to delete the directory 'Test' and the file within, select the directory (single-click) and select the item 'Delete' from the Icon menu. A requestor will appear, select 'OK' and the file will disappear.

I said before that the Shell can also be used to make directories and scan through disks. Try loading the Shell and typing the following:

```
Dir [press Return]
```

This will bring up a list of the Workbench disk, with the files and directories separate. The files ending in .info are the icons (such as the one we created earlier for our file). On WB3 you can change the current directory (the one you are accessing) by simply typing the name. For example type:

```
RAM: [Return]
Dir [Return]
```

Now there will be a list of the files contained in RAM.

You can create directories using the Makedir command, so for example type:

```
Makedir Test [Return]
Dir [Return]
```

You will now see the new directory. You can even delete things, as we did through Workbench, by typing:

```
Delete Test all
```

The word 'all' is written after the filename if a directory has files in it – this will make the Shell delete them. Again, there will be more information about this in the full tutorial on Shell in a later issue.

"If you didn't structure your disks, you would end up with too many files in the root directory..."

FILES ON FLOPPY

Files and directories can also be created on any write-enabled disk (the hole in the corner of a floppy must be covered). You cannot move, delete or create a file on a disk that is read-only (such as a CD-ROM). Directories on a floppy might be useful for separating your work. You could have directories for, say, your business documents, related pictures, personal letters, school work etc. If you didn't structure your disks you would end up with too many files in the root directory.

There are also several programs that allow you to perform the commands, usually only available through Shell. *Directory Opus* is an excellent example, and the new version (reviewed in *AF99, 92%*) is possibly the most versatile piece of software ever released. If you intend to use your computer seriously I do recommend that you buy the program or look in a PD library for a similar one. Next month we'll look at different types of disks and assess the pros and cons of each type.

DOpus 5.5

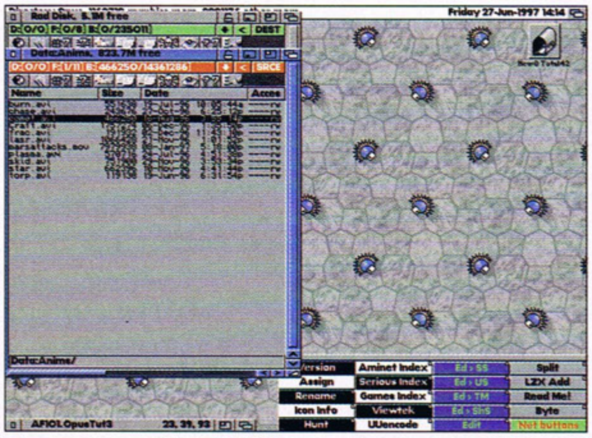
CONTENTS

Can you tell the difference between a JPEG and an LHa archive? More importantly, can your *Directory Opus*? Ben Vost explains...

Welcome to the third installment in our mammoth *DOpus 5.5* tutorial. This month's main topic will be filetypes and what *DOpus* does with 'em. In case you need further instruction on the topic, filetypes are the sorts of data file that your computer uses. Hence, an IFF ILBM picture is a filetype, just as an ASCII text file is a filetype. But you have to train *DOpus* to make full use of the filetypes you use on your machine, and to use them the way you like.

That's where we come in. Have a look at the table of viewers that we recommend. Now comes the tricky bit. Well, not really, since *DOpus* is so good at detecting filetypes and working out all the difficult details for you. All you normally then need do is to specify what program you want to use for a particular filetype. But the secret to easy

"You have to train DOpus to make full use of the filetypes on your machine..."



It's better from *DOpus*' point of view if you have more than one file of the filetype you wish to check.

VIEWERS

Here are some of the viewers we use and recommend for use with *DOpus 5.5*. You can find them all on our CD in the -In_the_Mag-/DOpus5.5 drawer.

TEXT VIEWERS
- Internal *DOpus* viewer
- *Multiview* (especially for AmigaGuide documents)

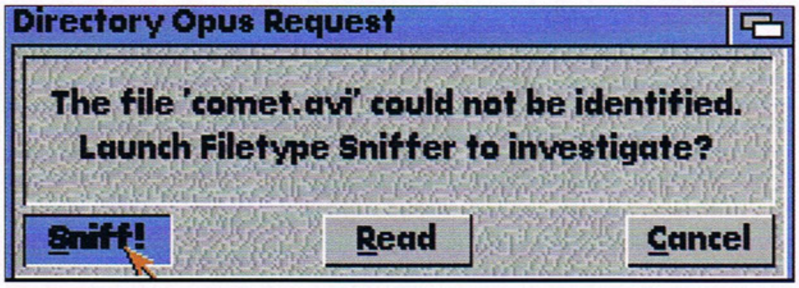
PICTURE VIEWERS
- *ViewTek*
- Internal *DOpus* viewer (IFF and datatypes only)
- *Cyberwindow* (for CGFX-compatible graphics cards)
- *Fastview* (particularly good for JPEGs
- *FJpeg* (just for JPEGs)

SOUND PLAYERS
- Internal *Dopus* player play16 (supports lots of different file formats)

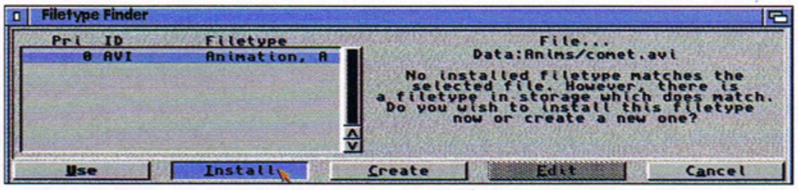
MUSIC (MOD) PLAYERS
- Internal *DOpus* player
- *HippoPlayer*

ANIMATION VIEWERS
- *CyberAVI* & *CyberQT* (for AVI & Quicktime animations for AGA and graphics card machines)
- Viewtek BigAnim (for those IFF ANIM5 files that are just too big for your memory)
- Internal *DOpus* viewer mp or
- *Amipeg* (for Mpeg playback, use *Osiris* on CV3D graphics card)
- *Flick* (for FLI and FLC animations)

MISC.
- ShowObj (for Lightwave and Imagine objects)
- LHa, Lzx, DMS, unzip (all archivers, essential for normal *DOpus* use)



Double clicking on that AVI file brought up this requestor.



If you're lucky and have a filetype defined, you can install here, otherwise...



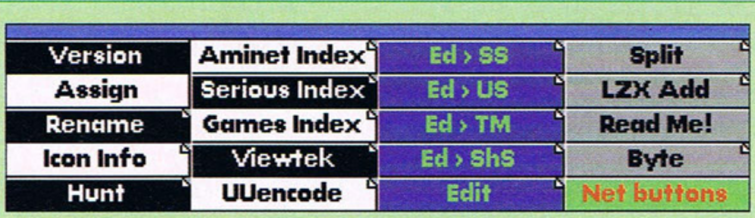
As we said earlier, it helps *DOpus* if you have more than one file of the type you want to create a filetype for. That way, *DOpus* will be more likely to choose the right parts of the file to base its filetype on.

HIDDEN HINTS

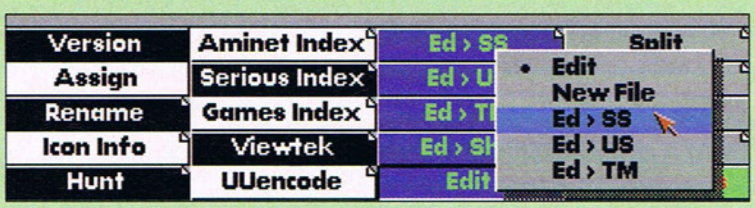
If you're fed up with only being able to create buttons with three functions, what about making a button that fulfils, say, six functions? Or twelve? Or more? It's easy enough, but not explained that well in the manual. Start by Alt-clicking on an existing button in your button bank. Our problem is to get rid of all those "Ed > " buttons in our third column, so we'll Alt-click on Edit.

That brings up the standard button edit requester. You may have noticed the ability to "Add" new functions here, but been confused by exactly how to use them. Well, worry no more. Add a new function; for ours we've added one called "Ed > SS" (to edit our startup-sequence). Now click on the "Edit Function..." button. If, like us, you already have buttons defined, but you want to get rid of them, you can drag and drop them into the define function window. Once you've done this for as many new functions as you require, you can save your new, improved button bank and try it out. By just holding down the left mouse button on your new multi-function button, you should get a new pop-up menu showing you the list of defined functions for that button. Highlight the one you want to use and let go. The standard text is now gone and replaced with the text of the button you have chosen to use! Now a left button click on it will perform your chosen new function.

This means that we can now get rid of the other buttons that were previously needed for all the other functions now provided by our new multi-function button. As you can see by our screenshots, we could probably do much the same with the "index" buttons and save ourselves even more space.



Notice the Edit button. With the magic of *DOpus* we will now transform it into a multi-function button.



Once we've added the new functions, holding down the left mouse button over this button now pops up a menu. Select the entry you want and let go...



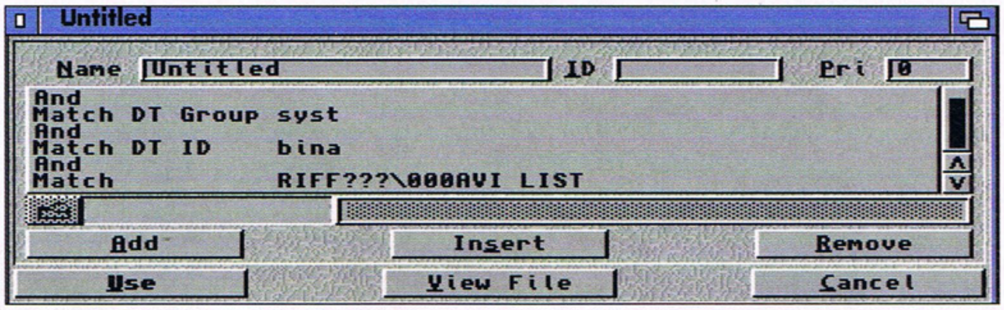
...and voila, you have a new button.

> **"The secret to easy filetype definition lies in making damn sure you have the filetype sniffer turned on."**

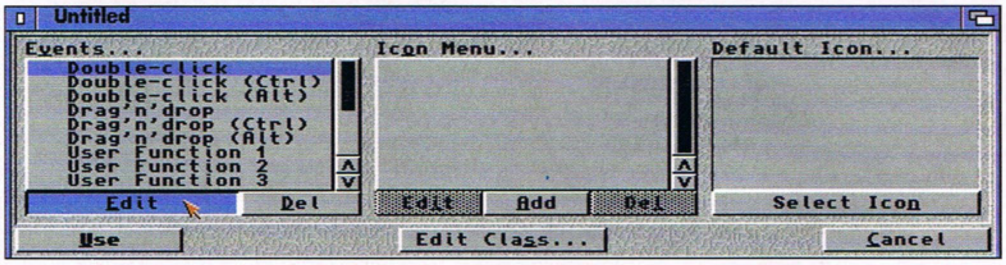
filetype definition lies in making damn sure that you have the filetype sniffer turned on. You'll find this in the Options preferences under Miscellaneous.

Now when you double click on a file that *DOpus* can't match for a filetype, a window will pop up asking you if you want to sniff out what sort of file it is you've clicked on.

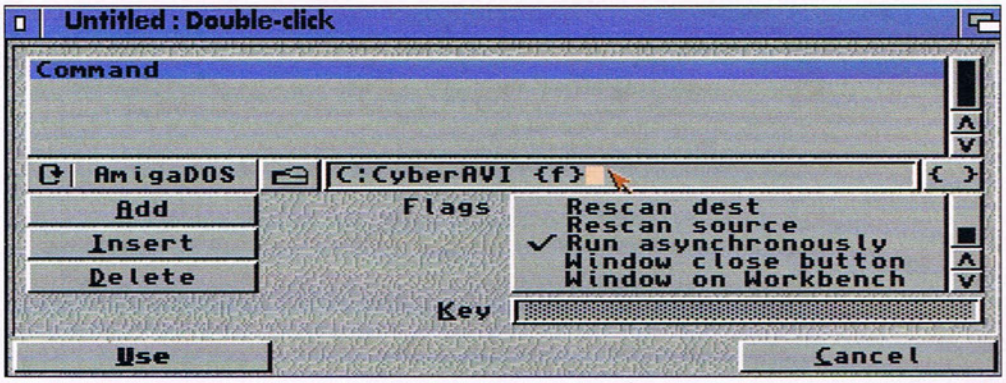
If you then say yes, *DOpus* will search through the file for obvious hints as to what sort of file it's dealing with. It looks for headers, datatypes and finally filename extensions, then it looks in the DOpus5:storage/filetypes directory to see if there's already a filetype defined for this particular sort of file. If it finds one, it then asks if you wish to have this filetype installed. Otherwise, you're going to have to deal with it yourself, not a difficult process, now that you know a little more about how it all works.



We should have changed the title for this filetype since it's still "Untitled", but you can see here how DOpus arranges its criteria for checking that a file is of the right type.



Now we pick when we want to use this file type. Here we've selected Double-click, but this is also valid for any of the User commands if you want to create a button that shows everything, as explained in the first chapter of this tutorial.



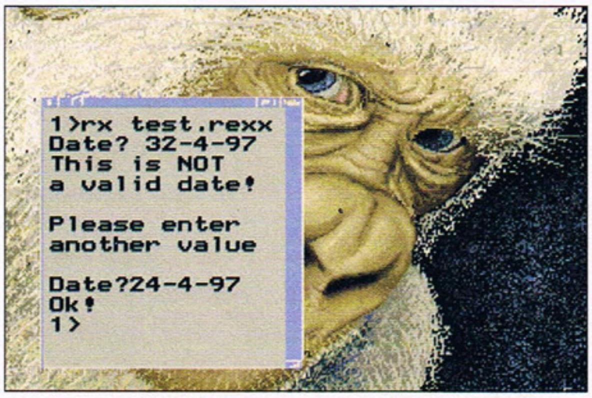
Now we enter the details for the command to run. It may be worth checking the CLI arguments for a program if, say, you want the AVI to run on a particular screen, or to loop.

Advanced ARexx Coding

Creating Console-based Applications

More advanced ARexx help as our resident ARexx guru Paul Overaa explains how to use console-based windows within your scripts... Part 1

The way in which people interact with their computers has dramatically altered over the last ten years. Before, many home and small business machines would be connected to a separate "intelligent" terminal. Setting up screen displays wasn't just a matter of writing pixel information to memory – programs had



Using Pull/Say commands for your standalone scripts is a little archaic given the Amiga's otherwise excellent graphics capabilities.

> **"Programmers were far more familiar with this style of coding than they are today..."**

to send sequences of control characters which adjusted things like the cursor position and screen colours. When the user entered data and pressed Return, the terminal transmitted the user input back to the computer for processing.

TABLE 1

ASCII Code (Hex)	Chosen Action
0-7	Ignore these characters
8	Do a backspace and remove last character
9-19	Ignore these non-printing characters
20-7D	Print normally
7E	(~) Ignore this character
7F	(delete) Ignore this character

• Make a note of the operations to be performed by the key parsing routine!

LISTING 1

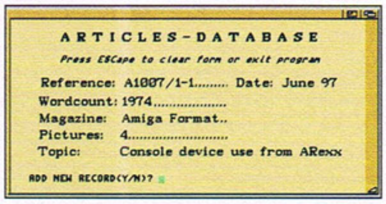
```
WriteToConsoleDisplay: Procedure expose g.
parse arg window,r,c,text$
call Writech(window,g.CSI||r||'3B'x||c||'48'x)
call Writech (window,text$)
return
```

• This routine provides a tidy way of positioning the cursor and writing text at a specified screen location.

Programmers were far more familiar with this style of coding than they are today, but terminal use is still big business in the mainframe/Unix world. Even the Amiga has built-in ANSI control sequence terminal emulation, in the form of the AmigaDOS console device. In short, the console device can be regarded as a kind of externally-connected terminal, that, on receiving characters, either recognises them as a "command" to be acted upon or as text to be displayed.

THE AREXX CONNECTION

Similarly, characters typed at the keyboard can be read from the device and used as program input. Over the next couple of issues, I'm going to show you exactly how these facilities may be used from ARexx. Many ARexx users do write stand-alone scripts using Say/Pull instructions, which work via a



Luckily it's quite easy to convert scripts into console device equivalents like this!

conventional Shell window. Sure, it's easy but the approach has a number of disadvantages, including the fact that you're stuck with a rather primitive "command line" style of user interaction. One solution is to opt for using third-party ARexx utility functions, such as those found in Jeff Glatt's Intuition-based rexx_intui.library, but this is only feasible if you already know quite a lot about Intuition programming. The console device approach offers a middle path and, providing a few ground rules are observed, it's quite easy to create a set of functions that allow console-based displays to be used with any standalone ARexx script. You will find that you have to forget about Say and Pull style I/O and opt for equivalent routines, based on ARexx's direct file functions, coupled to a raw window, but this provides the most control when manipulating the display and monitoring the user's keyboard activity.

IT'S EASY

As far as actually opening a raw window is concerned, it's easy – you use the Open() function in this fashion...

```
call Open(window,'RAW:40/40/560/200/mywindow')
```

The second argument specifies the console type, top left position and initial size of the window. The first argument, which I've called window, is the file handle used for I/O operations and to write a text string into such a window we'd use Writech() like this...

```
call Writech ('window, Amiga Format Rules OK!')
```

The corresponding input function, Readch(), needs a file handle plus a

LISTING 2

```
set cursor to selected position
do while received input character is not a carriage return
   if count of characters received is LESS THAN allowed count
   do
       Select
          When char=function or special key
             ignore all associated characters
          When char =backspace
             remove last character
          When char is printable
             print and add to input string
          Otherwise – ignore character
       end
   end
   else force an exit from parsing routine
end
```

• Keypress parsers require more complicated code and it's a good idea to sketch out a pseudo-code framework before starting work on the real routine.

count of the number of characters to be read. To collect one character and place it in a variable called keypress$ write...
`keypress$=Readch(window,1) /* read character */`

With an AmigaDOS raw window, this function returns the moment a keypress is detected and in fact, hitting the return key would generate yet another keypress, that could be detected by a further Readch() call! The console sequence needed to cause a change in cursor position takes the form... 9b [R] [3b C] 48. The first value, 9b hex, is known as the control sequence introducer (CSI), R represents the display row and C the display column (the 3b hex value is a "separator that allows the console device to distinguish between the two real row and column

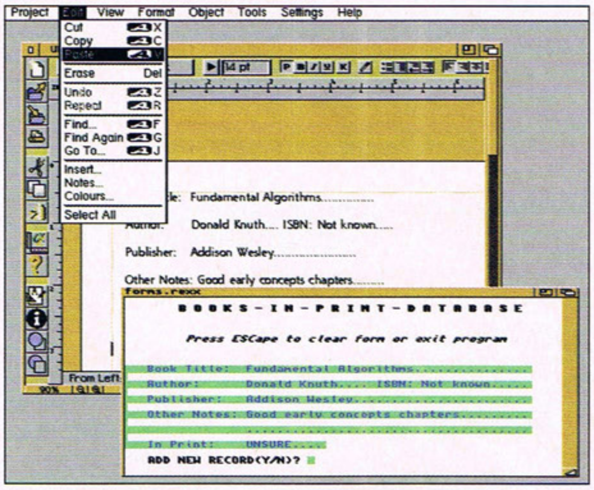
"Input fields need to be controlled to prevent the user from overwriting"

parameters"). The brackets indicate that items can be treated as optional and this means that not only can either row or column positions be omitted, but the 3b hex separator (which is in fact an ASCII semicolon character) only need be provided when either both row and column values are given, or when just a column value is specified. In other words a row position on its own can be moved by sending the three character sequence... 9b R 48.

One way to generate these sequences is to create a cursor-controlling function that takes a pair of row/column co-ordinates and sends the appropriate command sequence to the console window. It's possible to go one better than this and create a function that takes both the cursor position and the text to be displayed as function arguments, (a typical routine is shown in **listing 1**) allowing you to position and set field names, write error messages and so on using statements like...
`call WriteToConsoleWindow (20,0, ERROR_MESSAGE).`

COLLECTING INFORMATION

Opening a raw window and creating a display by writing text items at particular places on the screen is easy enough. But



Now you can even copy data from a raw window to the clipboard – so form fields and data items can be pasted into other applications.

to develop applications you also need to be able to collect keypress data from designated screen positions and this is where things get more complicated. To produce any real-life application scripts it is necessary to carefully control what a user can, and cannot, type. Input fields need to have their length controlled to prevent the user from overwriting areas of the display assigned for other purposes. Similarly some key presses (such as function keys) may need to be ignored while others, like backspace, have to be recognised so that special actions can be taken. It is necessary to parse the input stream and process only those keys deemed to be useful!

GET TRANSLATING

When the keyboard is read using Readch() the Amiga keyboard keys labelled with ANSI standard characters will be translated into their ASCII character equivalent. Displaying ordinary characters in routines like this is easy – just set up a character count, print the character to the screen using Writech(), and add the character to the input string being collected. With other keys an escape sequence will be produced and the number of characters generated can and does vary from key to key. One solution to this is to choose which key presses you want to support and then use a character collection loop whose exit condition is either the reception of a carriage return character, or the reception of more characters than specified when the routine is called. In order to do this effectively it's necessary to monitor the use of special keys (Home, End and so on) so that their associated characters can be safely ignored.

Backspace handling is also a little more awkward for two reasons: firstly, printing a backspace only moves the cursor back one position – it doesn't actually remove the character passed over, so we need to explicitly do this as a separate operation. One solution is to print a backspace, then a blank, and then backspace again to re-locate the cursor. The best idea with this "parser creation" stage is to make a preliminary list of the actions to be carried out, as particular characters are received (see **table 1**) and then work on each part of the problem in isolation. It also helps to have some type of pseudo-code plan of the routine itself (see **listing 2** for an example of this).

DEFINITION

The best approach for representing field names, screen position co-ordinates, and lengths of reply fields is to use compound variables. This allows do/end type loops to be used both to set up the display and to collect data. This also solves the problem of passing field names to routines that have been defined as procedures because ARexx provides an "Expose" keyword which allows you to make particular variables "visible" to a procedure. By defining a suitable stem for the field definitions, all that needs to be done to make the whole screen layout visible to a procedure is to make the stem itself visible using a single "Expose" declaration. You can do the same thing for control character definitions or any other constant items that need to be available throughout the program. The advantage is that all these definitions are then defined in just one place, yet to access them from within procedures you only have to expose a couple of stems.

Don't worry if those last two sentences sound a little abstract – I'll be dealing with the issues they involve in detail next issue. The next step is to show you how to take a conventional Say/Pull based ARexx script, sketch out a suitable alternative display, and build a working console-based equivalent. It's not difficult at all, and the only bad news is, you'll have to wait until next month for details!

LISTING 3

```
g.TRUE=1; g.FALSE=0; g.CR='0D'x; g.BACKSPACE='08'x
g.SPACE='20'x; g.APPROX='7E'x; g.ESC='1B'x; g.CSI='9b'x
g.BACKGROUND = g.CSI||'3e'x||'32'x||'6d'x
g.CELL_COLOUR = g.CSI||'34'x||'32'x||'6d'x
```

• Details of awkward control strings and other constant values are easy to hide by building up static definitions.

PPaint

The restrained Nick Veitch gets rather animated about *Personal Paint*'s storyboard features.

CONTENTS

While it is nice to be able to create pictures that look really stunning, they do lack a certain element – the fourth dimension of time.

Animations are not created simply for art's sake either. They are also used in video presentations, embedded in multimedia creations, and employed in the format of transfer animations, for Web browsers.

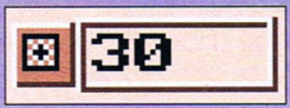
Although early versions of *PPaint* didn't have much in the way of animation support, this has all changed now. Your Coverdisk version of *Personal Paint* includes a number of excellent animation tools, among which is the impressive storyboard feature.

As outlined below, the storyboard will give you a thumbnail preview of each frame in the animation that you are working on. This enables you to perform various global editing functions, such as duplicating, inserting or cutting frames and changing the colour palettes.

Creating a good animation takes a lot of work and there is no avoiding the fact that you're going to have to generate every frame yourself. All this requires a lot of time and patience, with cunning use of *PPaint*'s spare page and brush functions, we can at least cut out a sizable chunk of the labour…

I would strongly advise anyone considering lots of animation work to upgrade to version 7.1, which has excellent ARexx features – get it free with our subscription offer on page 84!

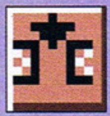
ZERO IS FOR STORYBOARD



This gadget is used for adding frames to your animation. Simply enter the number of frames you would like to add and press return. Subsequent additions can be made by pressing on the little plus button to the left.



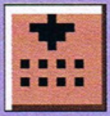
Quite simply, this button is used for deleting the selected frame from your animation. Select the frame you wish to delete (the frame around it will turn from a dark colour to a light colour) and press this button. The selected frame will disappear, and the other frames will be resequenced. You can delete multiple frames by pressing and holding the left mouse button while dragging the pointer across a range of frames.



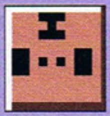
This button is used for duplicating frames. Select the frame, or group of frames, that you wish to duplicate, click on this button, then click on the place in the sequence where you want the duplicates to be placed.



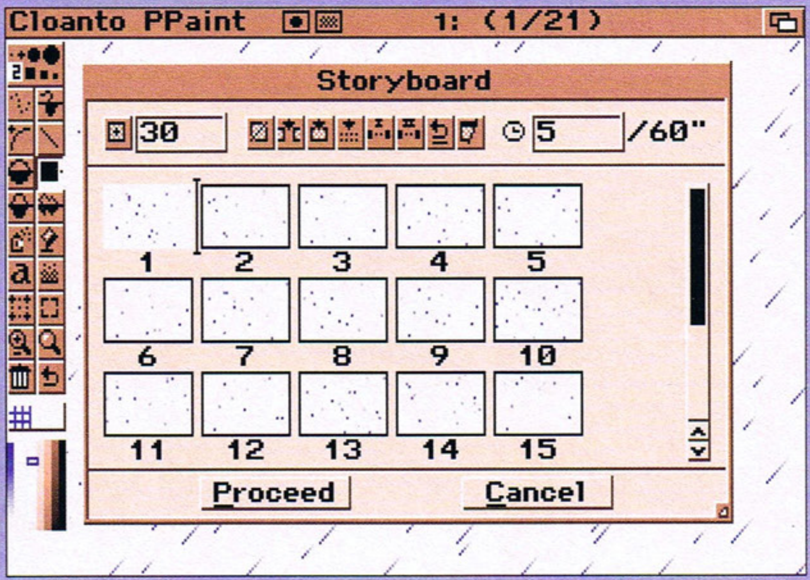
If you simply want to copy a frame into another frame, select it, press this button, and then select the destination frame. The contents of the destination frame will be replaced with the contents of the first selected frame. No new frames are added to the animation.



PPaint animations can have different colours in each frame. This button is used to copy the current palette to a destination frame or range of frames.



As with the colours in an individual palette, you can also perform a "spread" function between the differing palettes of individual frames in the animation. The effect is that the colours gradually change between the palette of the selected frame, and the palette of the destination frame.





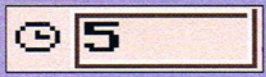
This button also perfoms a palette spread function, but uses the HSV colour model instead of the RGB one.



If you make a horrible error, you can undo it with this clever little button.

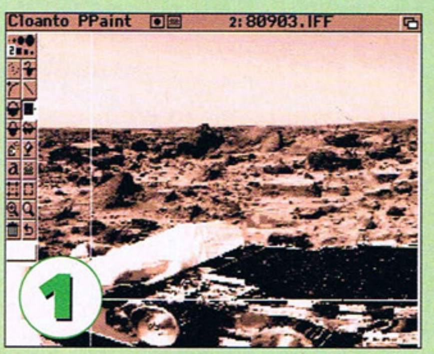


Use this button to hide the storyboard window. Hold down the mouse and the storyboard will disappear, allowing you to see the screen underneath. Release the mouse when you are finished.

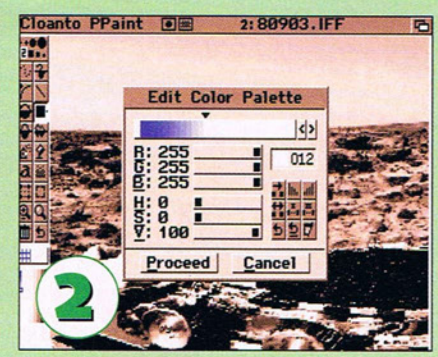


This gadget is used to enter a frame delay for each individual frame, or a range of frames.

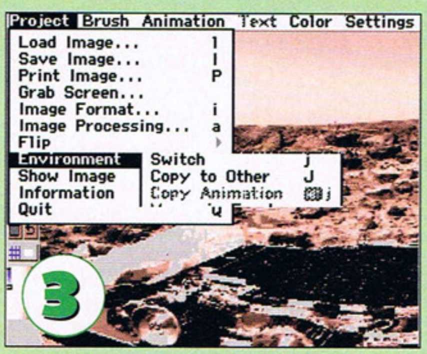
RAIN ON MARS



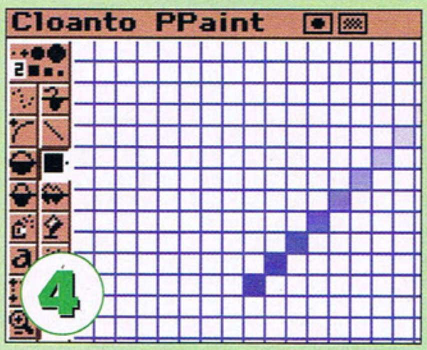
To start our wonderful anim, first choose a backdrop. Make sure you use one with plenty of colours. This picture was kindly provided by NASA and the Sagan Memorial station on Mars.



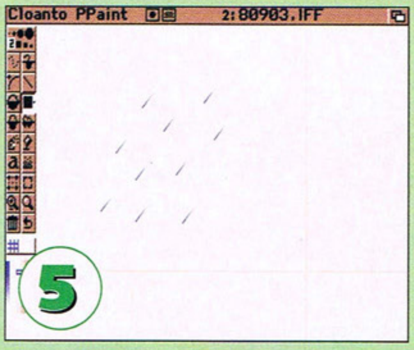
Edit the palette to include a range of blue colours (use the spread feature). Then use Colour>remap to remap the screen image. The image should appear virtually unchanged.



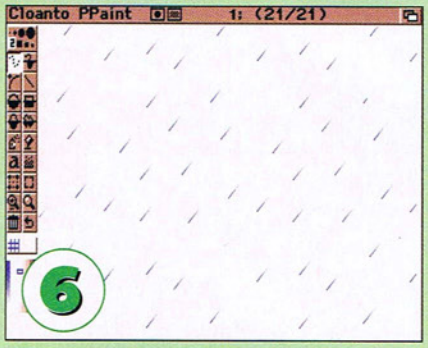
We are going to use the spare page for creating our anim. To ensure it is in the same format with the same colour palette, use the Copy to Other menu item (or press Shift-J).



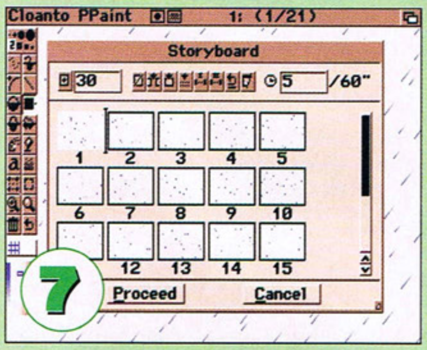
Now clear the page and, with the magnifying glass, draw a big drop of rain. Do make it reasonably big, and make it at a 45 degree angle (otherwise scrolling it will be hard).



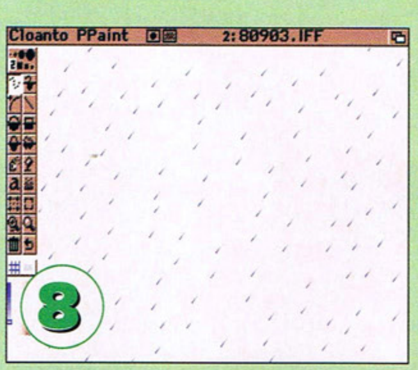
Now cut out your drop as a brush and make a large area (roughly square) of rain. Cut out this larger area as a new brush, and use it to fill the entire screen.



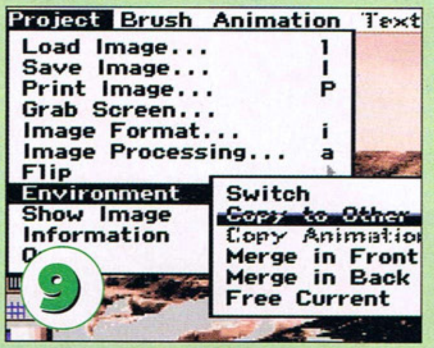
Press j, clear the screen and add 21 frames to the animation. Now use the Environment> merge in the front menu item to copy the image from the spare page.



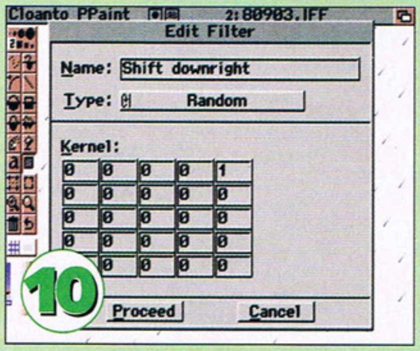
Press 2 to advance one frame. Go back to the spare page and create a new rain picture. Do this about 3 times. Copy these frames in sequence into the blank frames in the anim. (1 to 4, 7 etc.)



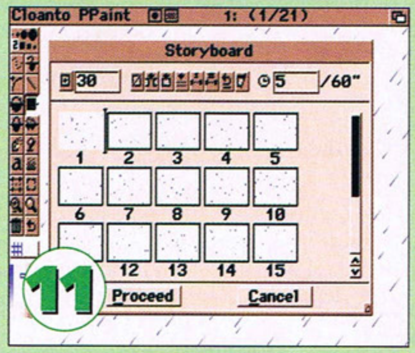
Now go back to the spare page and draw more rain, but using a brush about half the size. This will be used as a second layer of parallax rain for our animation.



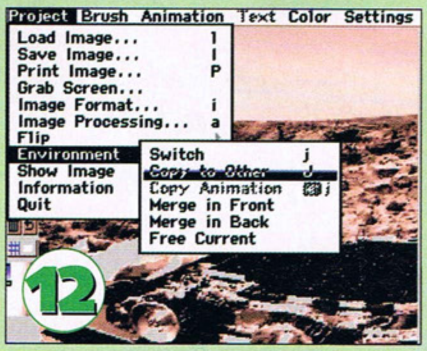
Flip back to the main screen and choose merge in Back from the Environment section of the Project menu. Your image will now have two layers of rain. Advance one frame and switch back ('j').



Set up a filter as shown here. This will move everything down and to the right. Press 'a' to process the screen. Repeat the previous step (you may add more rain drops to the top and right).



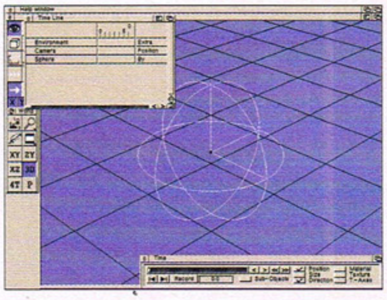
When you have finished all the frames you should have a parallax scrolling layer of rain, and a random one in the foreground. It took some effort, but so does most good animation...



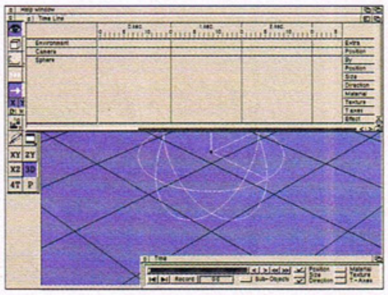
Now simply load the background image on the spare page, switch to the animation and use the Merge in Back to paste it into each frame. Press '5', sit back and relax as it rains on Mars.

Cinema4D 2

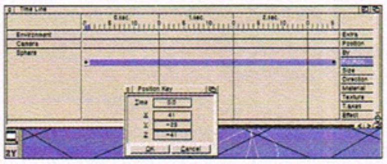
CONTENTS



The Time Line display is the key (animation pun intended) to a fine degree of control over your objects.



Right-click on each object to expand the display into a list of attributes.



For accurate movement, use the Position slot to add start and end values. *Cinema4D* does the in-between stuff.

ESSENTIAL INFORMATION

- The Time Line window is where you can define effects which occur over the length of the animation.
- You can set the start time and end time of the effect, and include multiple effects for each object.
- You can edit the settings by clicking on the start and end points of the time bar.
- Effects can alter the appearance of an object (its material, how the texture is applied) or the position, size or shape of the object.
- Special Effects allow you to explode, melt or flutter your objects. These work best when objects are composed of many smaller pieces. Use subdivide to split your object into parts before applying them.

Tired of moving your balls around the screen? John Kennedy now demonstrates how to change their colour, texture, shape and even how to melt them. Nasty.

Last month we looked at the basics of creating an animation with *Cinema4D*. We managed to create an object, and have it move around the screen. Hardly earth-shattering, but it at least demonstrated the ease with which *Cinema4D* can generate multiple images. Now we'll look at some of the more advanced types of animation facilities which are available. Each is suited to its own particular event, but of course you can combine different options as required.

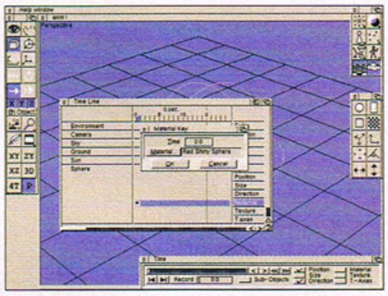
Before we get stuck in, we'll need to look at a new window which we skillfully avoided last month. First start a new project, and then create a simple sphere object. Next, from the "Window" menu select the Time Line option. This opens up a new window which represents time flowing from left to right, for each of the objects in the scene listed beneath it. If you have used *Imagine*, you'll recognise it as a version of the Action Editor.

To see the details associated with each object, click with the right mouse button to expand the attributes. For example, right-click on the Sphere and it will open to list the names of the settings which can be stored. This display is the key to advanced animation, as from here you can change all manner of things: from the colour and position through to producing special effects.

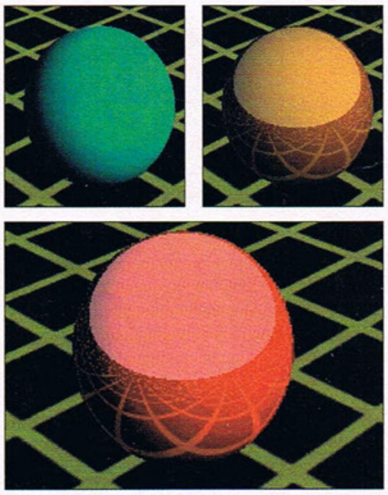
You can add a bar stretching over a number of frames (actually, the settings are defined in terms of seconds) and have a different setting at the start and the end points. For example, create a bar in the position slot which stretches from the start to the end, and then enter new values for the end points. The object will then move between the two locations over the course of the animation.

MATERIALS ANIMATION

This is the simplest kind of animation, and yet it can still be very effective. As you know, it's possible to assign a material to an object. Now by creating a bar in the Materials slot of the Time Line window, you can assign two materials – one at the start, and one at the end. *Cinema4D* will merge the two materials in the intervening frames and the object will smoothly change colour or transparency, or whatever other attributes you defined.



Here I've defined two materials: one red and shiny, the other green and dull. The sphere will start with one material, and end with the other. As you can see from these images, the transition is very smooth.



TEXTURE ANIMATION

Don't confuse the Material and Texture animation options. Although a material may make use of a texture (that is, a picture which is painted onto the object), the animation systems work in totally different ways. When you animate a texture, you define how the texture image is mapped onto the object. For example, you can make the texture change size, or rotate. You probably won't need to make use of this feature very often.

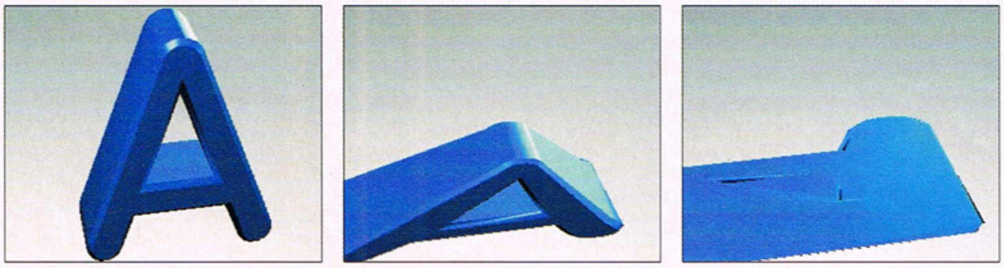
SPECIAL EFFECTS

Always the most fun, the Special Effects make complicated animation effects simple. *Cinema4D* has several to choose from. For best results you might find that you need to subdivide your object into smaller parts before rendering: for example, if you try to explode a simple sphere, not a lot will happen.

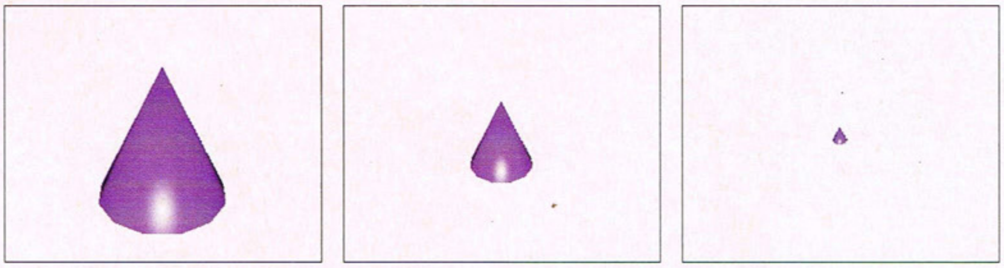
All the effects are used in a similar way: from the Time Line display, create a start and end point in the Effects slot. Then select the effect you want to use, and enter some parameters. You can always return to tweak these settings by double-clicking on the Time Line bar.



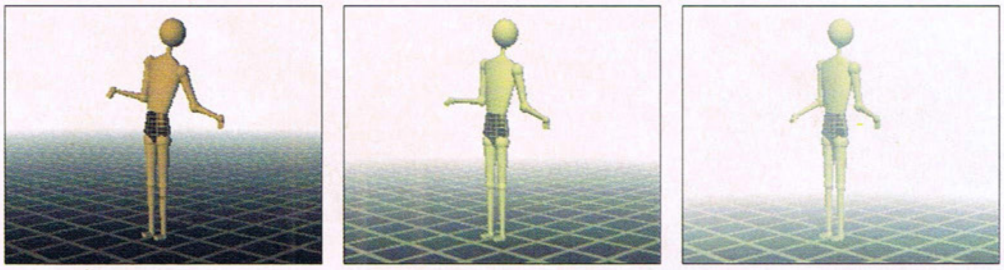
Go to pieces with the explosion effect.



Try this effect backwards for a Terminator figure rising from a pool of molten metal.



Try altering the focal length and moving the camera.



Control the fog by altering its distance from 10 to 10,000 over the animation.

Explode

Causes an object to fly apart into pieces. The pieces must already exist, so simple objects should be subdivided first. You can choose to have the shrapnel flying off in one, two or three dimensions.

Morph

Changes one object into another. The catch is that both objects most have the same number of edges and points – the easiest way to achieve this is to create one object, copy it, and alter the copy. You can then morph between the original and changed copy.

Melt

Causes the object to shrink downwards, spreading out in a puddle as it goes. Works best with objects constructed from lots of smaller components.

Pulse

Achieves an effect similar to flicking a long piece of rope – if your object consists of lots of parts, the individual parts will move at different times.

Wind

Great for flag effects, you can apply Wind to a plane and watch it ripple. Obviously, the more parts the object is constructed from, the smoother the rippling effect.

Vibration

Causes your object to wobble. Ahem. Very useful, I'm sure.

Camera and Light Animation

Often you will want to change the world in which your objects exist. You can do this by altering the camera, the lighting and the environmental settings.

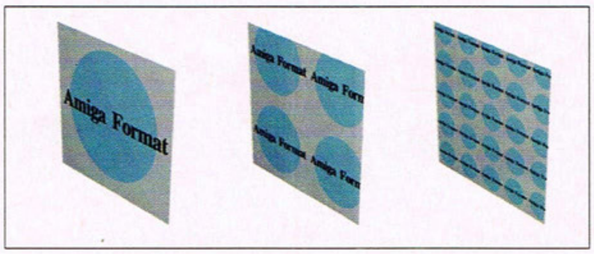
Camera

As well as controlling the position and orientation of the camera, you can change its focal length. This has nothing to do with making the image blurred (all objects are always in focus, no matter what their distance from the camera in *Cinema4D*) but altering the type of camera lens. If you know photography, it's like being able to switch from a wide-angle to telephoto lens. You can zoom in or out, or combine it with movement for a weird perspective shift effect (as currently over-used in television commercials).

Light

Source can be altered over time: specifically it's possible for them to change colour, ideal for funky disco effects and you can alter the brightness and change the spot light effect. One word of caution: save your projects often, as changing a setting, rendering and changing it again seems to cause my A4000/040 to hang from time to time.

Over time, the single texture image is shrunk to a fraction of its original size, and automatically tiled.



Environment

The fog effect adds depth to any scene, and now you can gradually fade it in (or out) over time. You can also fade in or change background and foreground images, and change the degree of ambient lighting. The position of the sun object can also be changed, so it can appear to move across the sky, altering the positions of the shadows it casts.

Skeletal Animation

Finally, one of *Cinema4D*'s most impressive animation tools is its "inverse kinematics" option. The best way to see this is to make use of the special humanoid "figure" object. Click on a part of the figure – for example, the hand – and then drag it. Make sure you've selected the special drag command and you'll see that the rest of the figure moves too. Move the hand, and the arm moves too. Record the settings as you did last month, and you've got a realistic moving figure which can walk up stairs or even dance like a teapot. AF



MailBag

Send your letters to: Letters To The Editor • *Amiga Format* • 30 Monmouth Street • Bath • Avon • BA1 2BW or email to: amformat@futurenet.co.uk – putting 'Mailbag' in the subject line.

IN TOO DEEP?

Your informative and wide-ranging breadth of subjects has ensured that I am and will remain, if possible, 100% Amigan. However, some of your articles have been either too short or not in-depth enough, and the Coverdisks have been quite complicated to use – I've lost one or two programs as a result.

When I lost my last job, I bought an Amiga with the money I was paid. I have been learning, with the help of yourselves, the potential of which these machines are capable. I now feel that I want to demonstrate a few ideas that I have in mind. My technical knowledge is limited and Amiga sources are scarce. If you can help a smitten follower, I would be most grateful to you.

D Small
Bow, London

We quite often receive mail from people saying that either some of our features are too technical, or that they would like more information on certain topics. The forum for this is the Creative section of the magazine, where we provide tutorials aimed at different levels of knowledge. If there is an area you would like to see covered in more depth, please let us know. We are always open to suggestions on tutorials no matter how simple or how technical they seem.



The tutorial section is your chance to find out about areas of the Amiga you are interested in.

IN THE YEAR 2525

I have bought an Amiga 600 and am hoping to get hardware for it. But I'm worried: will the hardware be 2000 compatible? My understanding is that the microchips inside hardware which deal with dates will not be able to cope with the turn of the century. Will this affect Amiga users who want to upgrade and keep their computer past the year 2000? Also, when is *Championship Manager 2* going to be released and are you going to review it?

R Shiels
Strathclyde, Scotland

Cunningly, the Amiga's designers gave it an 8-digit clock field, so it can store dates well past the millennium (I would just like to point out that the 21st Century doesn't really start until 1st January 2001) – though it will be a bit of a problem in the year 9999 – which coincidentally is when we are expecting Championship Manager 2 *to be ready. Actually, it should be ready a bit before that, but don't hold your breath.*



Don't worry about the date, your A600 is safe, at least until the year 9999.

PC, OR POWERPC

Recently, I nearly bought an evil *Windows* machine. I was saved in time by Phase5, who deserve vast amounts of praise for unleashing the PPC Amiga upon the unsuspecting world. Soon, with my 200MHz PPC 604e, I shall no longer have to admit to owning a 25MHz Amiga but instead a beast capable of 350 MIPS!

I urge all Amiga owners to join in the revolution and buy a PPC Accelerator from those nice people at Phase5. At under £300 for a 170 MIPS 603e it is impossible to refuse, resistance is futile! If enough people buy the PPC then we will see more dedicated software and soon PPC-only applications and games.

This is the only way to save the world's most versatile and wonderful machine: the Amiga. If you fail the Amiga we will see it die before us here and now; the future is beckoning and to fall at this last hurdle would be utterly tragic, especially after the years of hard work and the millions of pounds Phase5 have poured into the PPC Amiga. Curse the evil of *Windows* and enjoy the bliss of outperforming the world's fastest PC!!

C. Douglas
Argyle & Bute, Helensburgh

I'm sure we'll be able to more heartily recommend the PowerPC card when they are actually available, but it's good to hear you have rejected the ways of the "other side".

PAST AND PRESENT

I am a person with a very eerie tale to tell. I decided to convert a PeeCee tower case and use it as a side-cart case for my peripherals. I already had a disused case in the house, from a PeeCee that my dad used to have. So, hopefully with the aid of *AF99*, there will be a trailing IDE and power cable leading to a black tower.

However, the spooky thing is, on the case, located just below the floppy disk drive, is a one word epitaph – ESCOM.

Chris Hanretty
via email

I'm glad our feature inspired you to recycle the old junk lying around your house. Very environmentally friendly and all that.

TOWERING SUCCESS

I have just built up a tower system and to any readers who may have worries about doing it – don't, it's cheap and easy:

Tower + 200w power supply: £40
Quad speed CD-ROM: £45
IDE LEAD 40 to 45: £17
IDE hard drive 3.5 120Mb (second hand): £10
Total: £112

Come on lads, hold your hands up that spawn-of-the-devil *DMS* DECRYPT XXXyawnXX is crap, let's face it. Now before you get all defensive, I can use *DMS* with the shell and I have *LZX* set up on my *DOpus*, which is very good at extracting. Please do something about this soon.

J. Ramsbottom
Norwich

Continued overleaf ➡

I'm glad you agree that it's cheap and easy. I'm not quite sure what your point is about the DMS file on the CD. Don't you like it, or can you not get it to work? If it doesn't work, it's usually because you have an old version of the CanDo *libraries installed...*



Towering success – many of you have written in to tell us how you have rebuilt your Amiga.

UFO ENEMY WELL KNOWN

Fellow Amigans – it has come to my notice that the world has been duped into making PCs that conform to reversed engineered artefacts.

As I watched the well respected American programme "Dateline" – shown on NBC Europe 10/07/97 – the origins of today's PCs became clear. The article was all about the 50th anniversary of the alleged alien Roswell Crash. An ex-Major Colonel General something was interviewed and confirmed that he had seen the bodies of said aliens. He indicated that various technology we have around us today has its origins in the reversed engineered technology from the crashed alien craft at Roswell. Fibre Optics were mentioned. More importantly, microchips were given credit for being alien in origin.

Aha! I thought, it all fits, alien technology and PCs. The world domination of certain software companies, their leader – the only surviving alien offspring, "Seta gllib". It also explains the reason why the craft CRASHED!! Since then the aliens have tried to correct their system error 404 and have introduced to the planet more advanced (Amiga) technology.

Alas, Earth has been heavily influenced by Gllib who is desperately trying to fulfill the OMO (Original Mission Objective). This has now been superceeded by WASP ("wait and see" policy). I must go now as this connection is being watched.

Duty Officer Nigel Oliver Trent
via email

What can I say? I really want to believe...

GUIDE GUIDANCE

Is there any chance that you could do a tutorial about AmigaGuide? I have recently started using it but can only do links and various text functions, (bold, italic and underline).

I am almost positive that I once saw an AmigaGuide document that included pictures. Does one exist and where can I find it?

Adam Morgan
Yate, S. Glos

Yes. That was easy, wasn't it? We could do it as a one-off, because it wouldn't take too long. You can sort of include pictures in AmigaGuide, *in that you can have buttons which display pictures when pressed. All will be revealed soon.*

HAPPILY OUT OF DATE

Your letter of the month in *AF98* (June) so incensed me that I had to put pen to paper. How pompous of someone to think that everyone has spare cash to go out and buy a more recent machine, (second hand or not!)

I personally hang on to my Plus as I have invested a lot of money in it over the years, although I wouldn't get a lot back for it. Also, it has everything I need – an extra disk drive, a 1Mb upgrade, a 40Mb GVP hard drive, an LC200 printer (colour) and absolutely tons of software.

I keep on buying your magazine because I feel it has the best balance of articles, ads etc, on the market. But I am disappointed at the number of AGA-only bits of software you keep supplying as Coverdisks. I don't want to not buy your magazine and my suggestion would be that you could run a service for A500/+ or A600/ owners whereby if a Coverdisk is incompatible with their machine, you could offer alternative disks which we could swap them for. Thanks for listening and I hope to see the results of the caring *Amiga Format* team soon.

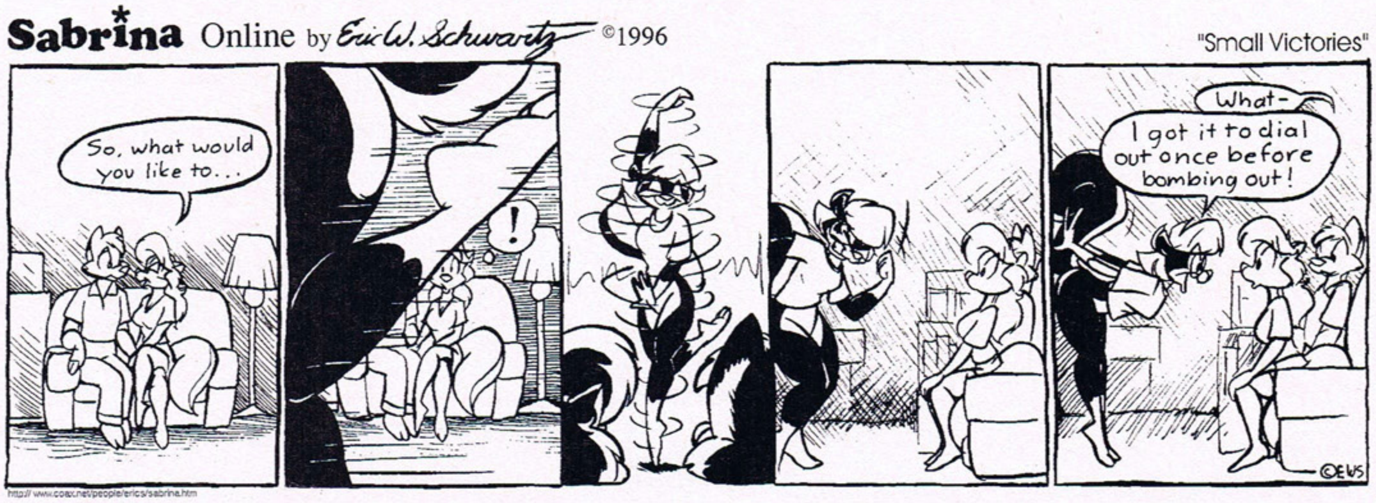
Louise Hart
Chigwell, Essex

Well, initially it seems to me that your second point answers your first. The simple fact of the matter is that a great deal of the software released these days requires AGA, or Workbench 3 at least. There is nothing we can do about this I'm afraid, and it isn't unique to the Amiga or Amiga magazines. In fact, it is only thanks to the Amiga's tremendous degree of backward compatibility, that you are able to run any Amiga software at all – if you had bought a PC at the same time you would have had to upgrade many times by now.

I appreciate that not everybody can afford to upgrade, but the consequences are that you are not going to be able to use some of the software which is released for the Amiga. Sorry, but that's how it is. I don't have a Teletext TV, but I don't suggest that the BBC shouldn't use it, or even not finance it with my licence fee. I'm afraid your idea for having separate disks would be



Although your A500 plus won't run AGA software, you could still upgrade to WB3.1.



logistically impossible. Even if we could find enough 1.3 OCS compatible software (because A500 owners shouldn't be left out) the cost of duplicating another disk would be prohibitive.

Perhaps you could afford to save up £60 and buy the OS3.1 upgrade from Power Computing. It will at least double the amount of software you can run on your A500 and the enjoyment you get from your Amiga too.

SMOKESCREEN

Recently the famed "magic blue smoke" released itself from my Alfadata 2008 SCSI card. Upon removing it I found the component labled D301 on the pcb had burnt out. It looks like a fairly common electronic part. I need to know what it is so I can replace it.

Craig Sutton
csutton@nelsun.gen.nz

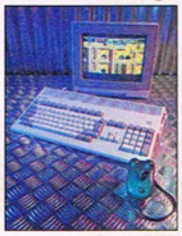
It's a fairly common 1N4001 Rectifier diode, rated at 1A 50V, costing a few pence. It could have burnt out due to a power spike, or something more serious. Have you moved the card recently? Check that nothing is shorting out on the board or in the actual Zorro slot before plugging it in again. Send future technical enquiries to Workbench as I don't know about anything technical at all...

GOOD DEEDS DONE FREE

Thanks a lot for *Amiga Format*. At the beginning of the year I sent a cry of help and frustration to your excellent magazine. Because of Amiga Tech's (Germany) demise, my A1200 (which was faulty and under warranty, or so I thought), became lost in the system for a year. After many years and faxes to Digi Tech, to whom I had sent the computer for warranty repair, I got no reply. I also found out that they had gone into receivership. With your intervention and information, I was able to get another A1200 from Gasteiner Ltd, who had received my machine from Digitech. So thank you *Amiga Format* again, and thanks to James Tracie of Gasteiner Ltd, who remembered that the computer arrived in a cut down Magic Pack box and sent me the computer that I'm using now.

Victor Hayes
Thailand

Another happy customer. If you have any tales of outstanding service from an Amiga dealer, why don't you drop us a line.



Who would you turn to if your Amiga went missing?

NEVER MIND THE HYPE

I hope Gateway 2000 do a damn good job and kick pee cee butt!! Can I make a suggestion? I think a new Workbench is needed, (Version 4). Not because Version 3 is no good, but because it gives an opportunity for marketing, publicity and easy money to invest with. All the time we see adverts on TV about how good, (crap), Microsoft is, with its fancy slogans so people won't forget its good, (no, still crap) products. This should be coupled with adverts showing people at home, at school, at work, using the Amiga to its full potential. Can I suggest that you print Gateway's postal and email address so that if any Amiga user has ideas they want to suggest, then they can put them directly to the boys with the brass at the top?

Neil Thomas
Kettering, N.Hants

GATEWAY2000
"You've got a friend in the business."®

It's an interesting suggestion, but surely the people who went out and bought the system would be a bit upset. However, there are a few things in Workbench that certainly require a rapid update. So perhaps it could be much hyped and (shock!) worthwhile.

You can contact Gateway at 610 Gateway Drive, P.O. Box 2000, North Sioux City, South Dakota 57049-2000, U.S.A. I feel obliged to point out though, that you should really be writing to Amiga International at: Amiga Int., Robert-Bosch Str. 11B, 63225 Langen, Germany or email suggest@amiga.de

CONGRATULATIONS

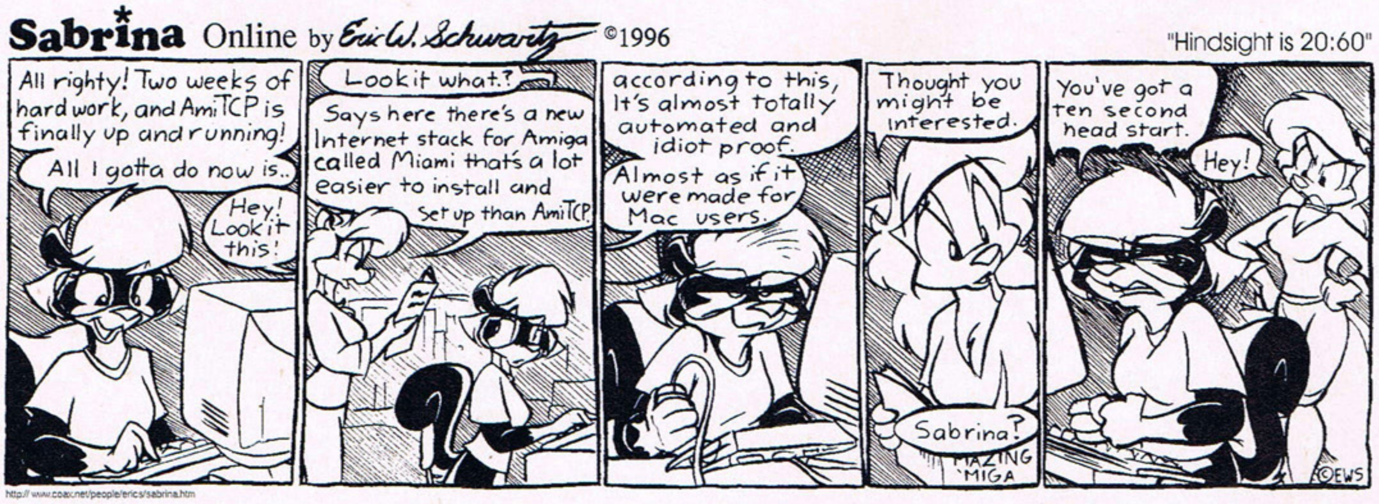
Thank you for an excellent and entertaining 100th issue – the CD(s) look great. I have been a customer of Commodore since the heady days of the VIC–20, when it was OK to talk about "pokes" in polite company; before "Star Wars" figures grew muscles. I have followed the Amiga through from the A500 to my A1200. I am now a teacher of IT, and have battled through many a session of *Windows*. I have to admit that the Mac is rather nice, and even the Archie has its points, but I wouldn't part with my Amiga!

The point of all this is to offer congratulations to Gateway on their positive start, and to assure them that, if they can live up to their press releases, they will have the undying gratitude and support of myself and the thousands of Amiga enthusiasts out there. Most of us are realists – we know the shortcomings of a machine that hasn't been updated in years – but we also know that we have the basis of a world-beater. The Power PC sounds hopeful, and Gateway's hints of a new OS, based on existing Shareware makes a great deal of sense. Forgive me if I remain privately slightly sceptical, but us Amigans are used to hearing promises. Still, best of luck to them if they can produce some results.

Paul Norman
Swansea

P.S Does anyone else think Harry Hill was better on "Saturday Night Live?"

Enjoy the CDs, we put a lot of effort in to making them something special. It's amazing how many people, given the company's tendency towards unhelpfulness, short sightedness and downright stupidity, have a history of owning Commodore machines before Amigas. I suppose it's because the hardware itself has always been excellent. I can understand why you're cynical of any promises of "jam tomorrow", but it seems only fair to give Gateway 2000 a chance – they aren't responsible for all the bad things that have happened to the Amiga.



Reader Ads

Can't find that game? Or desperate to sell so that you can afford to upgrade? *Amiga Format* to the rescue.

For Sale

● **2 x IDE hard drives** (170 and 120 Mb, Connor and Seagate, 3.5 inch, perfect condition). Make me an offer!
Stu or Paul on 01225 859568 (evenings) *or* ***paw@pisle.u-net.com***

● **A3/4000 50MHz 030/882 CPU card** with manual. £80 U.K. only.
Jason 01476 401282
ilya@enterprise.net

● **8Mb 32-bit 72-pin 60ns SIMM** £15 • DOpus 5 (Boxed with manual) £20 • GPFax (manual/patches) £20 • IBrowse 1.12a (manual/patches) £15 • Amiga Surfin' book £5 • Studio II Printer software (box/manual/patches) £20 • Final Writer 5 (box/manual/updates) £25 • Aminet CD's 10 – 18 £7.50 each • Aminet CD set's 1 – 3 £15 each • Women Of The Web (2 CD's) £15 • AGA Experience 1 CD £5 • StormScene CD £35 • Phase 1 & 2 CD's £5 each • Wordworth Office CD (DataStore 2, Organiser 2, Wordworth 5, Money Matters 4) £15 (P&P inc.)
David Bateman
22 Hemlock Avenue • Huntington
YORK • YO3 9DG

● **Blizzard 1220** with 4Mb RAM & 33MHz FPU. Box & instructions. £75.
Jayne Johnson
14, Les Genats • Cobo • Castel
Guernsey • GY5 7YQ
Tel: 01481 55077
e-mail jayne@doghouse.abel.co.uk

● **Swap Squirrel SCSI** interface for Dataflyer SCSI interface.
Tel: Karl on 01407 832778 after 6pm.

● **A1200 memory expansion** + 28MHz maths co-pro + 2 x 2Mb 80ns SIMMs. Will sell separately.
Tel: Scott on 01234 211910.

● **Kickstart 1.3 & 2.05** £10 each.
D Hughes Tel: 01282 698012

● **Amiga 1200 as new** in original box. Dust cover, mouse mat, mouse + joystick, some games and WB3, Wordworth, etc. £130
D Hughes Tel: 01282 698012

● **'HardFrame/2000' ZorroII SCSI** hard disk, mounted on card. £30 ono. 'OKI Microline 193' 9-pin black and white wide carriage (A3) dot matrix printer. £15 ono.
Tel: Ian 0114 281 7776

● **Loads of Amiga hardware** for sale, including four whole Amigas. For more details please email me at:
powersoft.pt@btinternet.com

Wanted

● **Has anyone got** the RPG game *Dungeon Master* II? I have tried several places but have met with no success.
Mr M. Sherborne
2 Surrey Road • Kettering
Northants NN15 6LD

● **I am desperate to find** a game called *Elite III: First Encounters*, or if you prefer, *Frontier II: First Encounters*.
Richard Hodge
1 Parsonage Green • Begelly
Kilgetty • Dyfed SA68 OYN Wales

● **I'm looking for** *Lords of the Realm*. Anyone know where I can get a copy?
S. Giles
39 Percival Road • Sherwood
Nottingham NG5 2FA
Tel: 0115 962 3142

● **I'm looking for** the A1200 version of *SimCity 2000* by Maxis. Also, does anyone know if you can get an Amiga version of *Transport Tycoon* by MicroProse?
John Bosworth
75 St. Paul's Drive • Chatteris
Cambs. PE16 6DG

● **Does anyone know** where I can purchase a CD32 manual?
Mr J. P. Keane
50 Longhill Road • Sheepridge
Huddersfield • HD2 1NP

● **Does anyone have a copy** of the update (1.1) of *Breathless* that appeared on an *AF* Coverdisk some while back?
Charlie Penny
24 Bishop's Close • Water Lane
Totton • Hants SO40 3GY

● **Complete Amiga C,** Mastering Amiga C or any other Amiga C books for beginners.
Call Chris on 01369 706007

● **Dreamweb AGA,** will pay ££££. 68030 for A1200 trapdoor, with MMU+FPU. At least 8Mb of PCMCIA compatible RAM.
email: korhonen@enterprise.net
Tel: 01429 279915 (after 6pm)

● **Does anyone know** where I can get a copy of *Easy Amos*?
Daniel Gitsham
32 Oulton Road • Lowestoft
Suffolk NR32 4QP

● **SAS/C Compiler wanted**, at least version 6.50 required so that I can patch it to 6.57 or above.
David Bateman
Tel: 01904 624637
david@theouterlimits .demon.co.uk

● **4 supplements** and Don's Genies for *ProDraw* which are now out of print. Good price paid.
David Sheffield
Tel: 0114 274 6357

● **PD contacts wanted**. Fast and reliable trader. No pirates please.
Andrew Jackson • 7 Nut Tree Close
East Huntspill • Nr. Highbridge
Somerset • TA9 3PN

● ***Leathernecks* by Microdeal.** Will swap or buy.
Karl • 34 Gregory Street • Longton
Stoke-on-Trent • ST3 2LU

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The Gallery

No hand-drawn pictures at all this month, but some really lovely renders.

ON THIS MONTH'S CD



The atmosphere of this picture made it the unanimous choice of our art staff for picture of the month. I wonder if there's an animation to go with this Titanic-inspired *Lightwave* render?

Storm by Simon Brewer



Adam returns this month with more pictures of planes, including this lovely trainer.

Goshawk by Adam Fresh



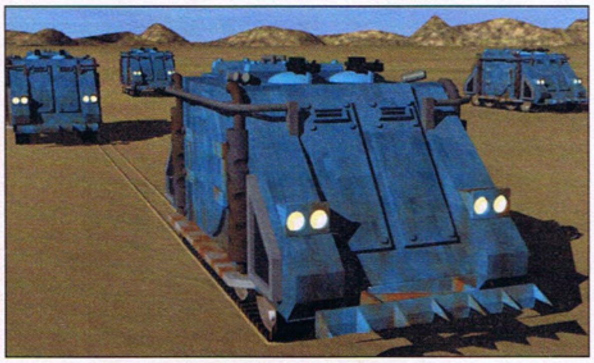
The monochrome and brooding nature of this image makes us think of *Front242*.

Band Fly by Mark Clarke



Mark Clarke's Snakeman is superbly detailed and only just missed out on this month's prize. The models in the scene are beautifully made and detailed and we look forward to more.

Snakeman by Mark Clarke



Simon's second entry this month is gorgeously detailed, especially the rust on the leading APC. Got the model from Games Workshop?

APC by Simon Brewer



Jordan's amusing take on the current Channel 4 ident logo isn't quite right (the circles are supposed to be in a 4 shape) but looks great.

Channel 4 by Jordan Cadby

This months Cover CD

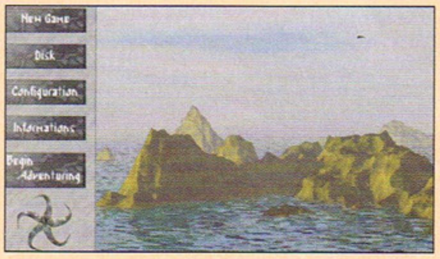
Heaps of new stuff for you this month, especially if you are a postscript afficionado. Ben Vost trawls through the seventeenth Amiga Format CD.

NEW Game Demos

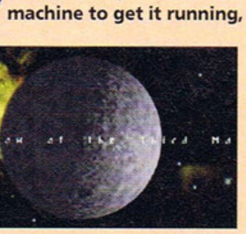




We have a whole bunch of new game demos for you this month in the ScreenPlay /Commercial drawer. *Shadow of the Third Moon*, previewed in the mag on page 34, is a voxelspace shoot-em-up to really get the juices flowing. You'll need a fairly stiff machine to get it running, but if you do you'll see the wonders of voxel-based landscaping – much more realistic than polygons!



Shadow of the Third Moon is a new game by Italian designers Black Blade Design.



We've also got a taster of the latest *Assassins CD* games compilation. There's over 25Mb of games here to whet your appetite and if it persuades you get the full monte you'll need to get in touch with Weird Science (0116 246 3800) who are selling it for £19.95.

There are loads of game demos here this month but keep a special look out for an updated demo of Titan's *Brainkiller* – a *Doom* clone, *Storm* – a jump and run game, *Hilt2* – an action/strategy game and *Sixth Sense Investigations* – a humourous graphics adventure from Epic (also previewed this issue). Give 'em all a go!

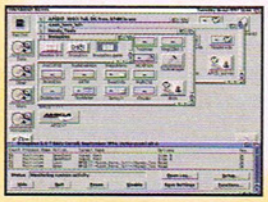




Sixth Sense Investigations (above and top) is a *Monkey Island*-like adventure game with you playing a bit of a defective detective. Try it for yourself and read Andy Smith's preview on page 36.

SPOTLIGHT ON A HANDY TOOL!

SNOOPDOS V3.0



Ahh, September 1994, I remember it well. Well, not really actually. There was something with a barmaid and a large quantity of beer, but other than that, it's all a bit blurry. Apart, that is, from the emergence of *SnoopDOS v3.0*. Earlier versions were pretty damn handy, but version three is nigh on indispensable. Gone is the console output and in comes a nice *GadTools* interface with more configurability and better features. But what's it do? *SnoopDOS* is one of those tools that people like *Amiga Format* always ask readers if they have when they're having a problem with a piece of software. It sits at the bottom of your Workbench screen and tells you what your Amiga is doing while you carry on with your work. You can specify that you only want to see fails so you aren't interrupted with endless messages about what your machine is doing correctly. This really is an invaluable tool. Make sure you've got it installed when you call us with a problem!

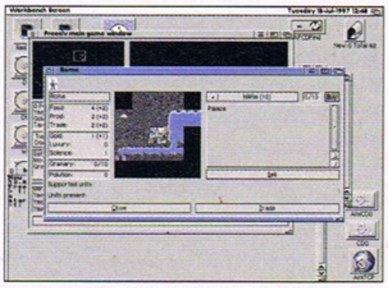
Seventeen already, eh? I remember when you were just a twinkle in Simon Stansfield's eye. And haven't you grown? Once you were a chaotic mix of stuff, but now your sternly organised and sorted and much more accessible. Lovely. But what have you got for me this month?

IN LOOK HERE 1ST!

This month sees a repeat of the Demon offer for *NetConnect Lite* – just in case you missed last issue. We also have the usual mix of groovy websites for you to peruse over with a cup o' tea and our ever present handy tools with which to make your Amiga better. You'll also find the absolutely superb *AFCDFind* tool here which searches our CDs faster than a speeding bullet, and the last appearance on the CD of our Reader Ads section which has now found a home in the magazine. So no more AmigaGuides please!

FREECIV

If you've got an Internet connection, or even two Amigas linked with TCP/IP and you like Microprose's *Civilization*, then this is definitely one game you need to play. *FreeCiv* is a port from a

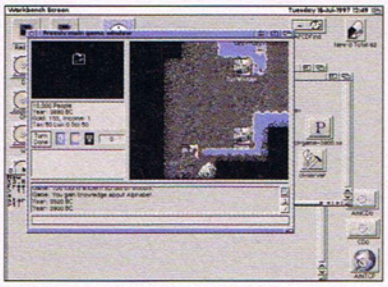


FreeCiv is *Civilization* but for free. You'll need mates to be able to play it though.



Unix game of the same name (so it needs the ixemul libraries which we've kindly provided for you in the AFCD17:-Seriously_Amiga-/Shareware/Programming/ixemul-46.1 directory) which is designed to be played with as many players as you can get together round their hot terminals – actually fourteen. The Amiga version allows you the same

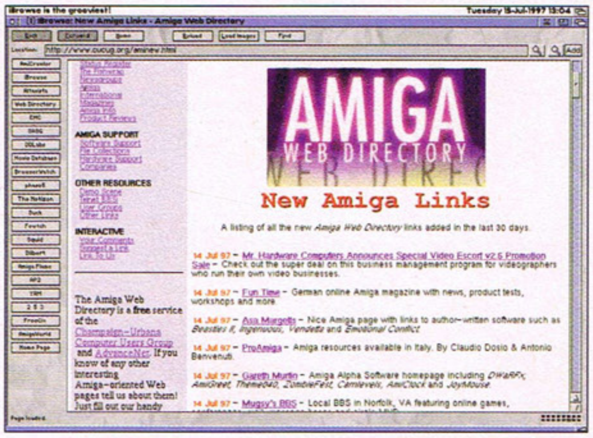
If you've got the memory you can run *FreeCiv* on a bigger screen with more colours.



FreeCiv is really the same as its commercial bigger brother, only with more players.

freedom, indeed you can even play against people using the *FreeCiv* client on other machines, and it uses MUI to give it an interface. We've tried it here in the office across our network and it works a treat! You can even change some of the default settings. Like most Unix-related software, this isn't a point and click affair to get running, but it's great fun once you do, so persevere.

FreeCiv is actually a complete clone of MicroProse's *Civilization* game, but it doesn't have any computer controlled opponents for you to fight against. That having been said, it can still be a struggle to bring your civilisation up through the dark ages to prosperity without anyone beating on your door, so it's also ideal as a practice tool before you jump in against real life baddies.



Update your old version of *IBrowse* on this *AFCD*.

IBROWSE PATCHES

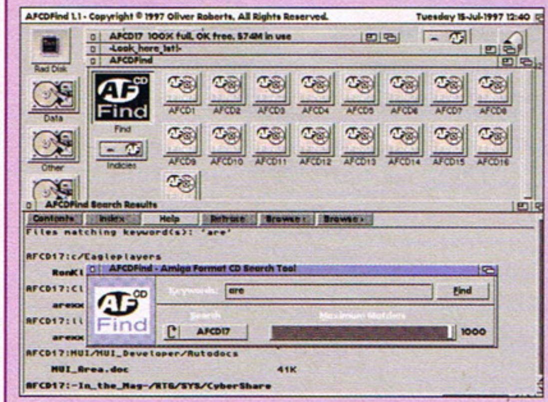
We've got all the updates you could ever need for *IBrowse* here. There's patches from earlier versions and patches from later versions and even a demo of the program if you haven't yet stumped up for it!

AFCDFIND

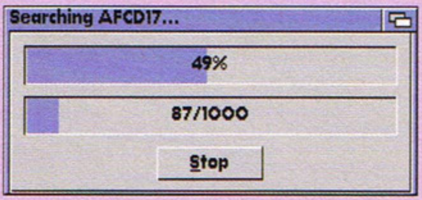
Our new addition to the *AFCD* is *AFCDFind* written by the incomparable Oliver Roberts – our favourite Amigan and author of the world-renowned *F1GPEd*. It's ever so easy for you to use – you can either double click on a particular index (that's why they've all got icons) or just double click on the program itself. By default, it'll search through the last three CDs of your choice or the whole library from disc one!

Best of all, it does it extremely quickly. To search for the Ben_Speaks! file on *AFCD16*, the most filled CD we've done to date, takes less than 10 seconds and that's trawling through more than 650Mb of data! What's more, you can set how many matches you'd like and *AFCDFind* will even tell you what version of a file it has found so that you don't have to search through old CDs looking for what turns out to be an old version of the file you wanted.

What's more, if you want fingertip access to these CD indices, you can move them to your hard drive. All you need do is make sure that the tooltypes for any index file you want, and the program, match up correctly. Running the index from hard drive rather than CD should also be even faster!



Oliver Roberts' *AFCDFind* will find you any file on any *AFCD*... fast!



At your fingertips

Our In_the_Mag drawer contains a whole host of add-on programs for your *DOpus* setup to act on filetypes. It also has all the ancillary files mentioned in Simon Goodwin's RTG and Emulation articles.

Our Screenplay/utilities drawer has quite a few hard drive installers again this month. Here's just a selection:

Chaos Engine
Skeleton Krew
Chuck Rock 1 & 2
Body Blows
Project X
Zeewolf 2



If you're fed up with running your favourite games from floppy...



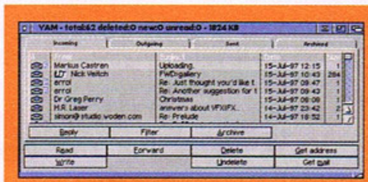
...the hard drive installers we have this month should come in handy!

In the Seriously_Amiga/Archivers directory we have three GUI-based extractors or packers that can handle several different file formats. They are: *Arcextract*, *Cruncher_v18* and *DzA*.

If you're fed up with the audio CD player you're using, why not try either *ACDPlay* or *MegaCD Player* in our Seriously_Amiga/CD-ROM directory?

For YAM users, you'll find some add-on ARexx scripts to make your life easier in the Comms/Other part of Seriously_Amiga.

At your fingertips



New ARexx scripts for YAM make it even better than it already is.

On the other hand, if you're a web browser fan what about all the transfer anims that are in Comms/WWW. You can even use *TAV* in Seriously_Amiga/Graphics to view the animations without having to load up your browser.

If you have a Microtek, Highscreen, Mustek or Hewlett Packard scanner, you'll be pleased to find that we have new drivers for them in our Seriously_Amiga/Hardware drawer.

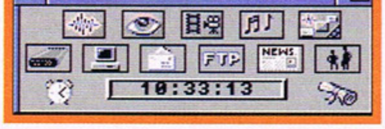
Search tools are always handy and Frank Würkner's FlashFind (he also wrote YACDP if the name seems familiar) is guaranteed not to have you tapping your toes waiting. Have a go with it in the Seriously_Amiga/Misc drawer

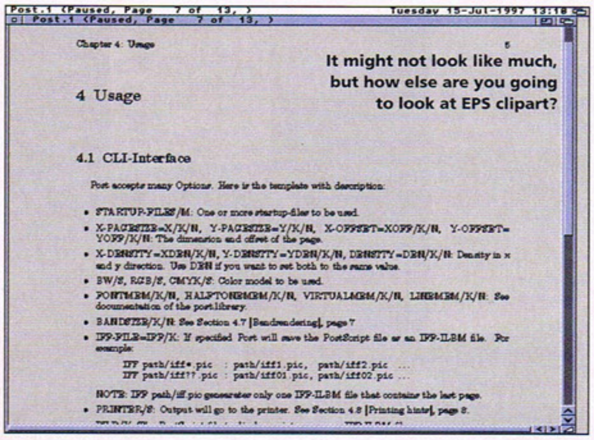
We've only got one demo of any note on our CD this month by Spanish coders CSL who tell us they're also working on a 3D game for both the Mac and Amiga (thanks to Shapeshifter apparently). It's in our PD_Select directory.

Have Fun!

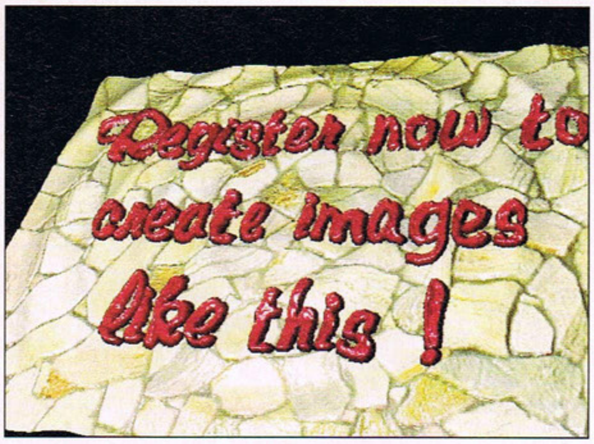
Reader Prizes

It was a toughie this month. Andy Thompson's *SetPro* is beautifully written, but isn't much use to anyone with a file manager. So, Andrew Edmonds' *UNIT* is the utility that gets the £50 reader prize this month. Well done, Andrew, your prize should be with you soon.





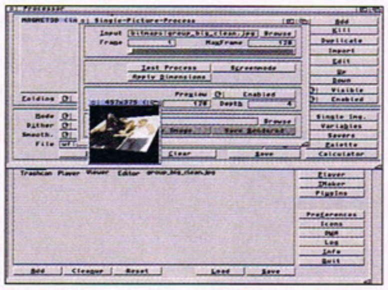
It might not look like much, but how else are you going to look at EPS clipart?



Hopefully, when you register it is also explained how to create images like this.

POST V2.0

It's big, it's improved, it's *Post v2.0*! Yes, we have the new version of this venerable PostScript interpreter here on *AFCD17*. This is a completely new version based on the earlier 1.86, but completely revised. It now has a decent Workbench, Shell and ARexx interface and is much easier to use. *Post* is a PostScript interpreter. This means it can take Postscript files, for example clipart and files, destined for a PostScript laser printer and display them on screen, or even print them to a non-PostScript printer. This is useful for a number of reasons not least of which is that most DTP packages are specifically geared towards PostScript and don't offer "lesser" printers some of the facilities available such as separations and registration marks.



***Wildfire*'s confusing interface hides a wealth of powerful image manipulation tools.**

WILDFIRE

One of the biggest demos we have on our CD this month is an image processor called *Wildfire*. It's big, it takes loads of chip RAM and it's also pretty complex to get to grips with, but on the plus side, it's also got more features than *Morph Plus* (apart from the actual morphing bit, of course) and is much better able to create animations directly rather than just frames (although it can do that too). It's a huge package (for an Amiga), so make sure you have at least 7Mb free on your hard drive, but quite easy to install – just make a directory on your hard drive called *Wildfire* and copy the contents of each of the drawers in Seriously_Amiga/Shareware/Graphics/Wildfire (apart from the archives drawer) into it. Then all you need do is set up an assign and you're away. To use it, you should have some animations on your hard drive already (in IFF or YAFA format) and *Wildfire* lets you combine anims together or just give an old anim a bit of a face lift. Basically, you'll just have to play around. It doesn't need MUI so the interface is pretty speedy and that's really all.

READER WARRANT

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Please note that the helpline staff provide assistance with technical problems directly related to the CD and cannot provide training on the software or hardware in general.

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AMIGA FORMAT COVERDISKS





David Taylor introduces this eleven-level demo of a new platform game and a set of extras for games players.

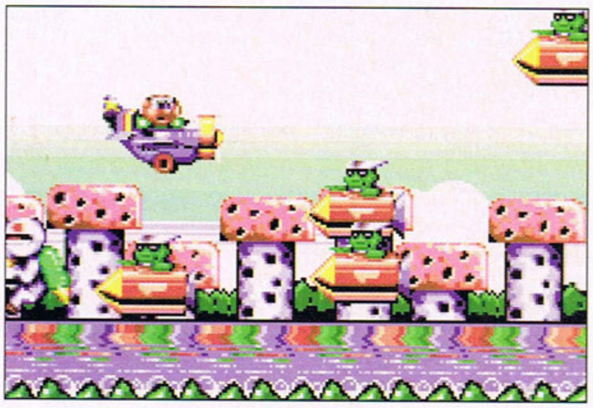
Plenty to keep you busy this month including a program to enhance your animations and an account manager.

StarBoy



StarBoy is an unusual mix of platform game and shoot-em-up, all controlled by joystick. To play the game simply load the *AF* Coverdisk and choose it from the menu – the game will load directly from the Coverdisk. If you do have problems loading it, you can also load it from Workbench by opening the Coverdisk and double clicking on the *StarBoy* icon – the Coverdisk must be in df0:.

When you first play the game you will find that you have to fly a plane through the first level to reach the first world. The top bar has a percentage complete indicator which shows how far you have flown. As you can see from the columns that whizz along the bottom of the screen, you are automatically being pushed forward, so there's no need to try to get to the right hand side of the screen. What's important for you is to avoid the extremely fast stream of enemies that fly at you. You do have a weapon and can shoot them, but be aware that there are probably too many to deal with in this way, so dodging is the best option.



Fly through the first level, avoiding the green men in pink rockets.

After this rather unusual start to the game you will land on the first world and can start playing the more standard platform game that makes up the majority of *StarBoy*. In order to complete a level you need to collect all the bombs up and then make your way to the gate. The bombs appear as sticks of dynamite and the exit has a big arrow on it! Through the levels you will also come across locked doors. To get past these you need to find the switch, which may be close to the door or elsewhere on the level. Switches appear in the floor as pink and yellow rectangles with circles in them. You will hear a click when you walk over a switch and activate it. Pink switches open doors and yellow ones close them. You can use these to access other areas or to trap enemies in rooms. When the door is shown as flat against the wall, with a padlock showing in the middle, it is open, but if it is shown as a thin stripe, it is viewed from side on and is closed.

TELEPORTERS

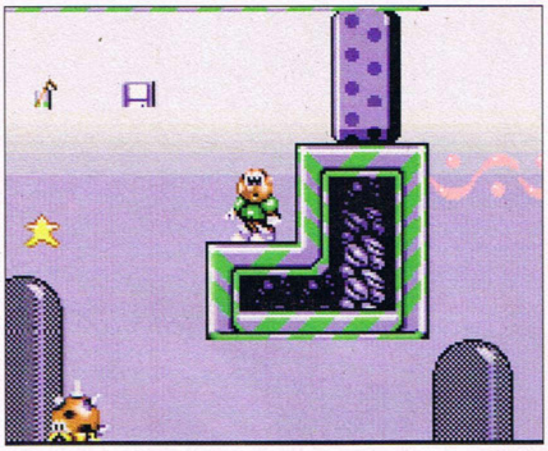
Also spotted around the levels are teleporters which look a little like smaller exits. When you walk onto one of these you will be teleported to another section of the level. You need to make use of these to access or escape from certain parts of levels. You will also come across areas where there is water with chains linking two areas. You cannot fall into the water, but you can jump onto the chains and go across the water hand over hand. To get off the chains, simply jump again onto the next platform. Be careful of roving blocks with eyes, which are enemies that guard some platforms. You'll need good

Hard Drive Installers

As promised last month we are bringing you a set of hard drive installers, so you can now run your favourite games from your hard drive instead of having to load them all from floppy. These installers only work with original games disks, so don't bother if you're a pirate – it serves you right. This month the hard drive installers are two sets created by Jean Francois Fabre and are for games from Core Design and Renegade. They include installers for *Banshee*, *Blastar*, *ChuckRock 1* and *2*, *Premiere*, *Skeleton Krew*, *Warzone* and *WonderDog* from Core and *Cadaver*, *Chaos Engine*, *Gods*, *Magic Pockets*, *Ruff'n'Tumble*, *Speedball 2* and *Xenon 2* from Renegade. When you run the installers you will need to define where you want to install your games to and have your original games disks ready to be installed from. Some of the installers also include trainers which will help you get past parts of the game that have had you stuck before. When you do use these, make sure that you read the documentation for each before starting, to make sure you do everything correctly.



Get more out of your games by playing them from your hard drive.



Fire your golden stars to destroy enemy spiky things.

timing to jump onto a platform and then straight back off again.

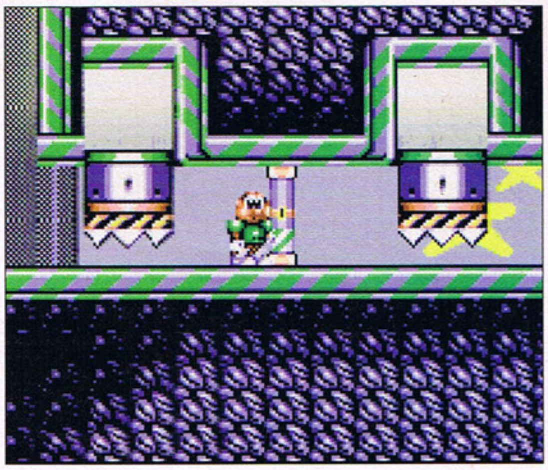
To protect yourself you have a weapon which fires stars but you'll need to practice with it. Remember that enemies will take more than one shot to bring down, so you may need to take a vantage point above them and drop stars on them several times. If you do get hit by an enemy you will lose some power – which is displayed by the number of fingers held up on the hand in the bottom left corner of the screen. When that is down to zero you will lose a life. Losing power won't change the part you are up to, but losing a life will put you back at the start position of that level. On some levels you will come across green "P Up" signs which are health bars you can collect to give you some power back. There are also "1 Up" signs which give you an extra life.

SWEET JOYSTICKS

Also dotted around the levels are bits of computer equipment, like disks and joysticks, and sweets, which you can collect for extra points. One tip is that if you can't make a jump onto a higher platform, look for one across from it that you can use to jump from. You need to stand right on the edge, which takes a bit of practice, especially because *StarBoy* has a little inertia and slides a little. If you want to know how many bombs you have left to collect on a level, look at the top bar which has an indicator. Incidentally you can take advantage of the fact that when you shoot an enemy, it will knock it back in the direction it came from, so you can use your fire to turn them around and stop them coming towards you – although be warned that the opposite is also true and you can turn an enemy walking away from you towards you.

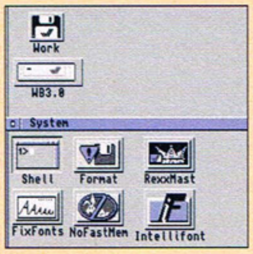
The full *StarBoy* game has 55 levels and can be bought for only £3.99 + 75p p&p from F1 Software. Payment can be made by cheque, Access or Visa to F1 Software, 31 Wellington Road, Exeter, Devon, EX2 9DU. You can phone or fax on 01392 215569 or get more info from the Web site at http://www.f1lw.demon.co.uk

That door's locked. You have to find the switch.

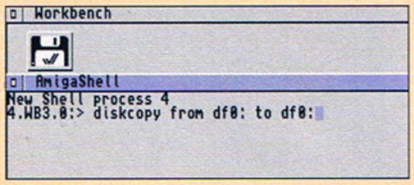


BACKING UP YOUR COVERDISK

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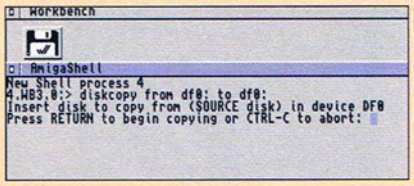


1 Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.

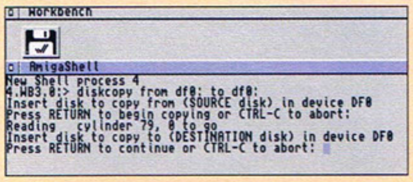


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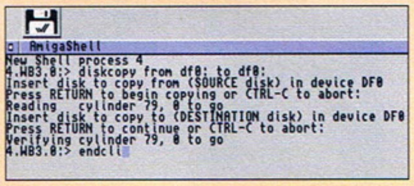
DISKCOPY FROM DF0: TO DF0:



3 When asked for the Source disk, insert your write-protected Coverdisk and press Return. All of the info on this disk will then be copied from the disk into memory.



4 Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



5 On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

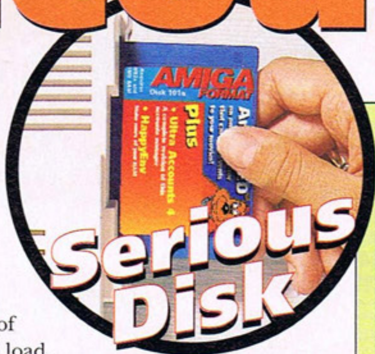
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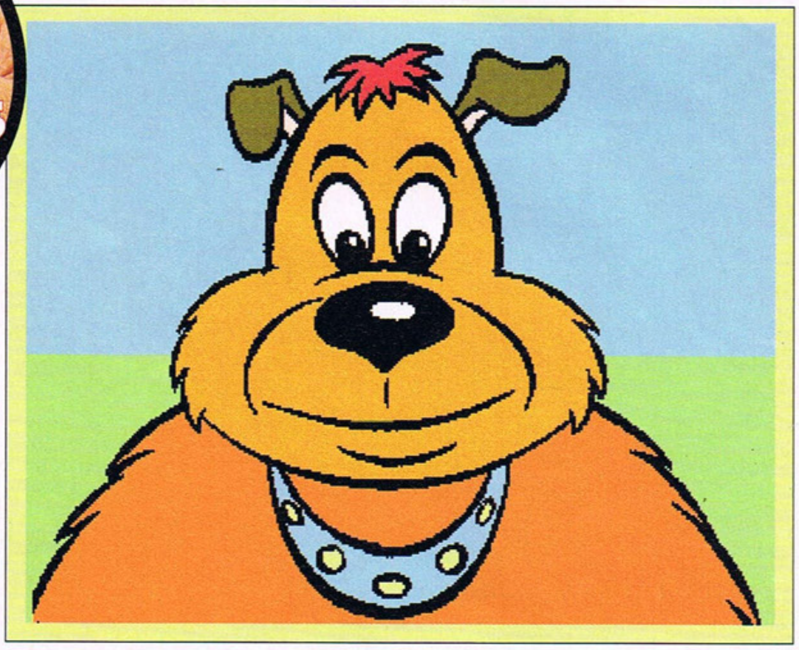
AnimatED & Ultra Accounts 4

This month David Taylor brings you the best selection from the Amiga's vibrant Shareware scene, including an animation enhancer, an accounts package and a utility to make more of your RAM.



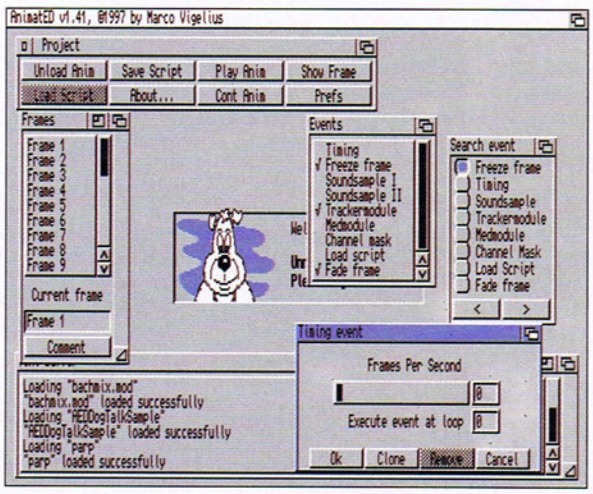
Amiga Format included an earlier version of *AnimatED* on our Subscribers' disk a few months ago. With a new version out, we decided it was time to share this great animation package with all of you. *AnimatED* allows you to load in a standard animation file that you've produced in a paint package like *Personal Paint* and then add elements to it. In essence, it is like a movie making tool – it turns an animation into a film.

You can add a music module to play in the background, or add sound samples, or pauses to frames. This allows you to create an animation with a varied frame rate and, with a little practice, you'll see how this can be used to make better, smoother animations without having to add in hundreds of identical frames.



The example animation that comes with *AnimatED* shows some of the features used to great effect.

"In essence, it's like a movie-making tool – it turns an animation into a film."



The Animation Editor gives you a very simple way of making more flexible animations with sounds and actions.

FRAMES

The program has a very easy-to-use interface and to start up, all you need to do is load in an animation. Each frame will be shown in the Frames Window. You can choose any frame and add a comment, which is useful for keeping track of what's happening at any one point. In the Events Window you can add an event to the frame. These include the timing, the frame rate and a freeze frame option, which holds the frame for a specified time or until a mouse or key press is detected.

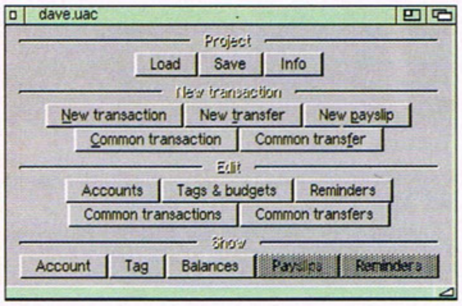
PLAY THE MUSIC

You can also choose a music module to play and use a mask channel option to take out a channel from the module, to allow a sound sample to be played. You must do this if the music module uses every sound channel, otherwise a sample played over the top of a channel in use will produce white noise. You can also fade frames.

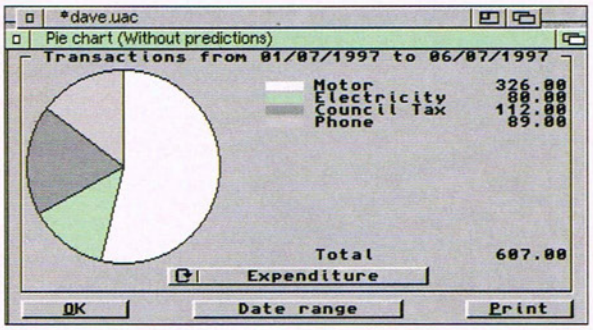
When you have created your script, you can save it out. Scripts can be played within the editor or from the separate player that is included. *AnimatED* is a Shareware product and if you like it, you must register it for £10 with the author, Marco Vigelius, at Kromne Zandweg 52, 3319 GH Dordrecht, The Netherlands.

ULTRA ACCOUNTS 4

Computers are often used to keep track of money and *Ultra Accounts* has now been in development for years. Release 4 looks very up to date and retains an interface that's simple to use. When you load the program you'll see you have a blank project. To start you need to set up the accounts that you want to use. Click on the Edit Accounts button and create the new accounts that you need. For example, you may have a cheque account, a savings account and a credit



The *Ultra Accounts* interface keeps all the windows shut until you need one. It makes it very easy to use.



You can even view the Tags, which cover different expenses, as a pie chart to see where you are spending your money.

WAIT, THERE'S MORE!

There are five more packages on this month's Coverdisk and we don't have space to go into too much detail, so here's a brief overview.

FastExec **is a simple CLI command to be entered into your Startup-sequence to make use of fast RAM for the exec.library and get a little better performance out of your machine. The documents tell you how to use it, but really all you need to do is copy it to your C: and execute first in your Startup-sequence.**

EasyPatch **is a program that you can use to automate the response to requestors. This allows you to cut down on the number of times you have to confirm something. To cut back on abuse of the program this version has been specially patched so that it won't simply cancel Shareware reminders.**

Formatext **is a small CLI command that allows you to re-format text to the length of line that suits your needs. It does this by stripping out and replacing returns that are in the file.**

Modem-Display **is a little utility which sits on Workbench and shows you the status of your modem, including what controls it is using. It saves you from looking at your modem to see if it is transferring data or not.**

Lastly, we have included the latest release of *XFD*. This program is a complete command system for unpacking files that have been crunched. It can deal with every file format we have ever encountered from the common PowerPacker, StoneCracker and Imploder formats to some of the rarer ones like ProPack (RNC), used by the likes of *SWOS* for game data.

card, so set up one for each. Every account needs an opening balance and you can enter maximum and minimum allowed balances if you want.

You can also set up Tags. Tags are designed to help you keep track of what you spend your money on. For example you can set up a tag for motoring expenses and then have individual items such as petrol, repairs, MOT, etc. under this tag. Because you may pay for these with different means: cheque from one account, cash from another, credit card from another, it would normally be hard to keep track of spending. Because all these transactions come under your motoring tag, you can just view the tag transactions and see what has been spent from where. These reports can even be printed out or exported as text.

"The first thing that you will notice from this is that you have more RAM available."

Ultra Accounts 4 also includes a set of configurable graphs so you can see how your accounts are doing and has a special wage section for all your payslip details. There are many more features, so check out the program's guide.

SAVE YOURSELF A CRASH

In order to run the program you need the reqtools.library (which most people should have) and the triton.library (which is included in the package – just copy it to libs:). When you use the package, note that there seems to be a slight bug on some systems. The program will crash if you try and save your project without any transactions entered into the accounts, so enter some data before saving. You can register the package for £10 with the author Richard Smedley at PO Box 59, Sutton-in-Ashfield, Nottingham, NG17 3HP.

HAPPYENV

The Amiga uses the RAM disk to store a lot of variables and preferences that programs on your system use, in a folder called Env. The files are loaded to there from your floppy or hard drive every time you boot up, regardless of whether that program is needed or not. The result of this is that firstly, it slows boot time by copying all these small files into your RAM disk and secondly it can use up a lot of your RAM for preferences that may never be used.

HappyENV changes this by adding in a special handler for Env variables. To install it you need to read through the guide and make the changes it details to your startup-sequence. The guide does many of the changes for you, but you do need to make a few edits yourself. It's easy, as long as you read the documents carefully. Once installed, you just need to re-boot. The Env variables are no longer loaded into RAM and the directory doesn't even exist there any more. The first thing you will notice from this is that you have more RAM available – on our machine this was 110Kb. As an extra advantage you can safely do "Delete RAM:#? All" in CLI to clean RAM, without damaging the Env variables.

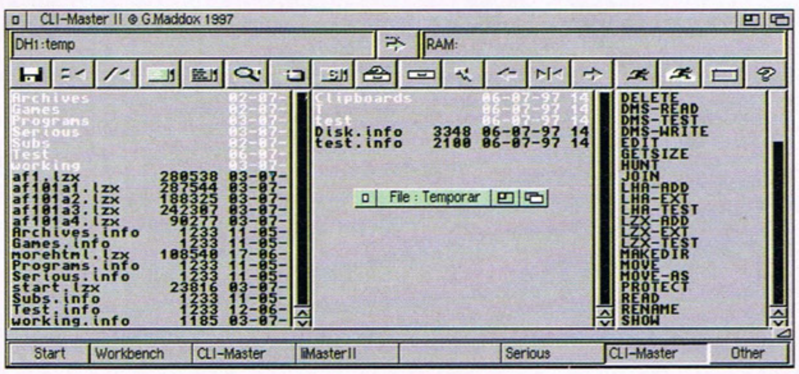
The author Martin Gierich has designated this Cardware, so send him a postcard at Narzissenweg 7, 76297 Stutensee, Germany, to encourage him to continue development.

CLI MASTER II

There are plenty of file managers around on the Amiga so why on earth would we want another one? *CLI Master* is a remarkably fast and small manager for OS 3+. It requires installing to work, but gives you quick access to all your files and allows you to do all the things that you would normally do from the CLI. Add to this the fact that it can do things like add icons to drawers and files, make assigns, test archives, join files and change protection bits and you can see that for under 30Kb it's a powerful program.

Although this program is Freeware, the *GUI4CLI* program that it uses to function is Shareware and to register it you must send "a few dollars" to D. Keletsekis, 14 King George Str, Athens 10674, Greece.

The *CLI Master II* package is very small but very quick, especially at reading drawers, and can be used for daily housekeeping.



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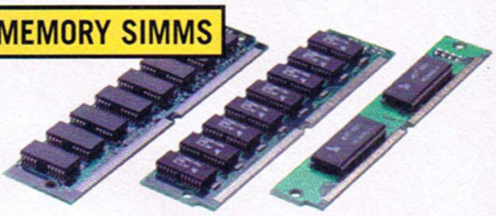
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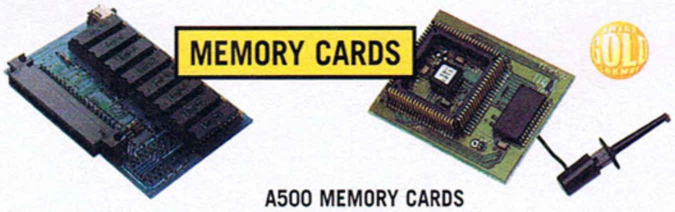


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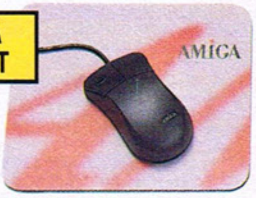
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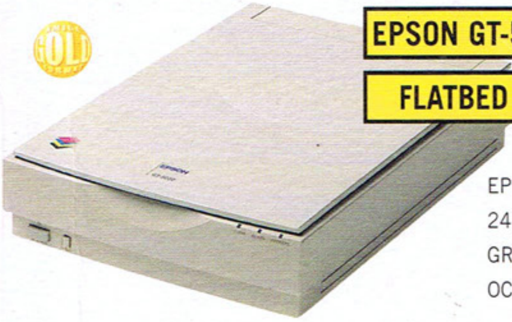
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